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Received May 19, 1917
Issued Aug. 22, 1917

U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, Chief

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MONTHLY WEATHER REVIEW

SUPPLEMENT NO. 7

AEROLOGY No. 3

FREE-AIR DATA AT DREXEL AEROLOGICAL STATION APRIL, MAY, AND JUNE, 1916

BY

THE AEROLOGICAL DIVISION, WILLIAM R. BLAIR, in charge

WASHINGTON
GOVERNMENT PRINTING OFFICE
1917

SUPPLEMENTS TO THE MONTHLY WEATHER REVIEW.

During the summer of 1913 the issue of the system of publications of the Department of Agriculture was changed and simplified so as to eliminate numerous independent series of Bureau bulletins. In accordance with this plan, among other changes, the series of quarto bulletins—lettered from A to Z—and the octavo bulletins—numbered from 1 to 44—formerly issued by the U. S. Weather Bureau have come to their close.

Contributions to meteorology such as would have formed bulletins are authorized to appear hereafter as Supplements of the MONTHLY WEATHER REVIEW. (Memorandum from the Office of the Assistant Secretary, May 18, 1914.)

These Supplements comprise those more voluminous studies which appear to form permanent contributions to the science of meteorology and of weather forecasting, as well as important communications relating to the other activities of the U. S. Weather Bureau. They appear at irregular intervals as occasion may demand, and contain approximately 100 pages of text, charts, and other illustrations. Subscribers to the MONTHLY WEATHER REVIEW receive the SUPPLEMENTS without extra charge. Copies may be procured at the prices indicated below by addressing the Superintendent of Documents, Government Printing Office, Washington, D. C.

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No. 8. (*Aerology No. 4.*) Free-air data at Drexel Aerological Station: July, August, September, October, November, and December, 1916. By W. R. Gregg and others. Washington, 1918. 111 p. 12 figs. 4°. Price 25 cents. (W. B. No. 642.)

No. 9. Periodical events and Natural Law as guides to agricultural research and practice. By A. D. Hopkins. Washington, 1918. 42 p. 22 figs. 4°. Price 25 cents. (W. B. No. 643.)

No. 10. (*Aerology No. 5.*) Free-air data at Drexel Aerological Station: January, February, March, April, May, and June, 1917. By W. R. Gregg and others. Washington, 1918. 101 p. 11 figs. 4°. Price 25 cents. (W. B. No. 651.)

No. 11. (*Aerology No. 6.*) Free-air data at Drexel Aerological Station: July, August, September, October, November, and December, 1917. By W. R. Gregg and others. Washington, 1918. 108 p. 11 figs. 4°. Price 25 cents. (W. B. No. 658.)

No. 12. (*Aerology No. 7.*) Free-air data at Drexel and the Ellendale Aerological Stations: January, February, and March, 1918. By W. R. Gregg and others. Cold winter of 1917–18. By W. R. Gregg. Description of the Ellendale Aerological Station. By V. E. Jakl. Washington, 1918. 82 p. 10 figs. 4°. Price 25 cents. (W. B. No. 660.)

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SUPPLEMENTS PUBLISHED.

No. 1. Types of storms of the United States and their average movements. By E. H. Bowie and R. H. Weightman. Washington, 1914. 37 p. 114 ch. 4°. Price 25 cents.

No. 2. I. Calendar of the leafing, etc., of the common trees of the eastern United States. By G. N. Lamb. 19 p. 4 figs. II. Phenological dates, etc., recorded by T. Mikesell at Wauseon, Ohio. By J. Warren Smith. 73 p. 2 figs. Washington, 1915. 4°. Price 25 cents.

No. 3. (Aerology No. 1.) Sounding balloon ascensions at Fort Omaha, Nebr., May 8, 1915, etc. By W. R. Blair and others. 67 p. 23 figs. Washington, 1916. 4°. Price 25 cents.

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No. 6. Relative humidities and vapor pressures over the United States, including a discussion of data from recording hair hygrometers for a period of about 5 years. By P. C. Day. Washington, 1917. 61 p. 7 figs. 34 charts. 4°. Price 25 cents.

No. 7. (Aerology No. 3.) Free-air data at Drexel Aerological Station: April, May, and June, 1916. By W. R. Blair and others. Washington, 1917. 51p. 4 figs. 4°. Price — cents.

FREE-AIR DATA AT DREXEL AEROLOGICAL STATION. APRIL, MAY, AND JUNE, 1916.

By the AEROLOGICAL DIVISION, WILLIAM R. BLAIR in charge.

In the 91 days of this period 140 free-air observations by means of kites were made. Of these 49 were made in April, 49 in May and 42 in June. The mean altitudes reached were 2015 meters above sealevel in April, 2460 in May, 2576 in June, and 2339 for the period.

On April 10 cirrus and cirro-stratus clouds changed rapidly in direction from west at 10 a. m., through northwest and north-northwest to north by noon.

A severe thunderstorm occurred on June 21 at about 1 p. m. The lowering of temperature resulting from this storm extended to an altitude of about 1600 meters above sealevel, as shown in the data obtained in the first flight on that day. At the time of the second flight, about two hours later, the temperature had returned to practically the same value it had before the occurrence of the thunderstorm.

TABLE 1.—*Comparison of mean temperatures, °C., for April, May, and June at Drexel Aerological Station and Mount Weather, Va.*

Altitude, sea-level.	APRIL.			MAY.			JUNE.		
	Drexel, 1916.	Mount Weather, 5-year mean.	Departures.	Drexel, 1916.	Mount Weather, 5-year mean.	Departures.	Drexel, 1916.	Mount Weather, 5-year mean.	Departures
meters.	*°C.*	*°C.*	*°C.*	*°C.*	*°C.*	*°C.*	*°C.*	*°C.*	*°C.*
396	[a] 9.5			[b] 17.5			[c] 20.5		
500	8.6	[d] 10.4	−1.8	16.8	[d] 17.0	−0.2	19.4	[d] 19.7	−0.3
750	6.5	8.8	−2.3	15.0	15.2	−0.2	17.2	18.2	−1.0
1000	4.7	7.4	−2.7	13.5	13.4	+0.1	15.3	16.7	−1.4
1250	2.9	6.1	−3.2	11.8	11.6	+0.2	13.5	15.2	−1.7
1500	1.5	4.6	−3.1	10.3	9.9	+0.4	12.2	13.7	−1.5
1750	0.0	3.1	−3.1	8.7	8.3	+0.4	10.9	12.3	−1.4
2000	− 1.7	1.7	−3.4	7.4	6.6	+0.8	9.2	10.8	−1.6
2250	− 2.9	0.4	−3.3	5.9	5.0	+0.9	7.6	9.4	−1.8
2500	− 4.1	− 0.9	−3.2	4.3	3.5	+0.8	6.0	8.0	−2.0
2750	− 5.4	− 2.2	−3.2	2.5	2.0	+0.5	4.6	6.6	−2.0
3000	− 6.7	− 3.6	−3.1	0.6	0.5	+0.1	3.2	5.1	−1.9
3250	− 8.1	− 5.1	−3.0	−1.0	−1.0	0.0	1.7	3.5	−1.8
3500	− 9.7	− 6.7	−3.0	−2.5	−2.6	+0.1	0.2	1.9	−1.7
3750	−11.6	− 8.2	−3.4	−3.7	−4.1	+0.4	−1.2	0.3	−1.5
4000	−13.5	− 9.7	−3.8	−4.5	−5.7	+1.2	−3.2	−1.5	−1.7
4250	−15.5	−11.4	−4.1	.....	.....	.....	−4.8	−3.3	−1.5
4500	−17.3	−13.0	−4.3	.....	.....	.....	−6.7	−4.9	−1.8

[a] Actual 24-hour mean temperature, 8.7°.
[b] Actual 24-hour mean temperature, 15.8°.
[c] Actual 24-hour mean temperature, 18.6°.
[d] At surface, 526 meters above sealevel.

A comparison of mean monthly temperatures for this period with the 5-year means at Mount Weather for the same months, is presented in Table 1. The departures at the surface are negative for all three months, but greatest in April. In this month negative departures increase from −1.8 degrees (C) at the earth's surface to −4.3 degrees at 4,500 meters. There is little variation from 1,250 to 3,750 meters, the departure being about 3.2 degrees. In May the departure changes from negative at the surface to positive at 1,000 meters and continues positive to 4,000 meters, the difference being small at all levels. In June the negative departure increases from −0.3 degrees at the earth's surface to −1.8 degrees at 2,250 meters and continues at about this value up to 4,500 meters. Complete data for the three months are given in Tables 2, 3, and 4.

Pressures and winds during the series flights.

During the three months 4 series of observations of diurnal variation were made. There were 8 successive flights on April 28–29; 10 on May 4–6; 9 on May 25–26; and 8 on June 28–29. The average heights of the highest points reached in each series were, in chronological order, 2,036, 3,492, 2,622 and 2,968 meters above sealevel. The duration of each series and the temperatures observed are shown in figures 1 to 4. Weather conditions, except the pressure distribution, and all other observed data may be seen in Tables 2 to 4.

At the beginning of the series of April 28–29, a ridge of high pressure extended from the Lakes Region to southern Texas, with a highest pressure of 1,022 millibars over eastern Texas. A pronounced LOW, 987 millibars, was central north of Montana and a moderate LOW, 1,006 millibars, over southern Arizona. During the series the HIGH moved eastward to the Atlantic coast, the northwestern LOW moved to Lake Superior and the southwestern LOW to northern New Mexico. The winds at the surface were south to south-southwest; winds aloft were southwest, shifting late in the series to west.

The series of May 4–6 is the longest thus far made and one of the best, except for a break from 10 p. m. of the 4th to 6 a. m. of the 5th, during which interval surface winds were too light for flying. On the morning of May 4 a LOW, 995 millibars, was central over Manitoba, almost directly north of Drexel. There was no well-developed HIGH. As this LOW passed eastward the surface winds changed from south-southwest through west and northwest to north. On the 5th a moderate HIGH, 1,019 millibars, was central over the Gulf States and a LOW, 1,002 millibars, was over Alberta. During the remainder of the series the southern HIGH remained practically stationary, and the northwestern LOW moved southeastward to eastern Nebraska. Winds at the surface during the 5th and 6th were south to west-southwest; winds aloft were west-southwest to west-northwest.

The weather conditions during the series of May 25–26 were entirely controlled by a trough of low pressure, 999 millibars, extending, on the morning of the 25th, from South Dakota to Colorado. This trough moved northeastward during the series and at 7 a. m. of the 26th extended from North Dakota to Iowa. The surface winds were, therefore, south-southwest and southwest shifting to north-northwest and northwest. Aloft they were southwest and west-southwest.

When the series of June 28–29 was begun, pressure was high, 1,023 millibars, over Michigan and low, 1,004 millibars, over Wyoming. This pressure distribution continued practically without change throughout the series. Winds at the surface were, for the most part, southeast to southwest; aloft they were south-southwest to west-southwest.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916.*

April 1, 1916 (No. 1).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
8:29	971.2	4.3	71	nw.	6.7	396	971.2	4.3	.....	71	5.90	nw.	6.7	388	.....	2/10 Ci., wsw.
						500	958.3	3.8	.....	65	5.21	nw.	9.6	490	0	
8:30	971.2	4.4	71	nw.	6.7	514	957.2	3.7	0.51	64	5.09	nw.	9.8	504	0	
						750	930.2	5.0	.....	57	4.97	nw.	16.1	735	0	
8:32	971.3	4.5	70	nw.	5.8	762	928.6	5.1	−0.56	57	5.01	nw.	16.4	747	0	
						1,000	902.2	3.6	.....	48	3.80	nw.	10.0	980	0	
9:01	971.6	5.6	68	nw.	5.4	1,045	897.0	3.3	0.66	46	3.56	nw.	8.8	1,024	0	
						1,000	902.2	3.6	.....	46	3.64	nw.	10.4	980	0	
9:34	971.8	7.3	60	nw.	5.4	780	927.3	5.1	0.63	47	4.13	nw.	12.3	765	0	Few Ci., wsw.
						750	930.8	5.3	.....	48	4.28	nw.	11.6	735	0	
10:25	971.8	9.3	51	nw.	4.5	590	949.3	6.3	1.60	56	5.35	nw.	7.7	578	0	
						500	959.0	7.7	.....	54	5.68	nw.	5.8	490	0	
10:32	971.8	9.4	52	nw.	3.6	396	971.8	9.4	.....	52	6.13	nw.	3.6	388	.....	Few Ci.St., wsw.

April 1, 1916 (No. 2).

P. M.																
1:36	969.6	13.3	31	nnw.	4.0	396	969.6	13.3	.....	31	4.73	nnw.	4.0	388	.....	2/10 Ci., wsw.
						500	957.2	11.9	.....	33	4.60	nw.	5.2	490	0	Few Fr. Cu., nnw.
2:15	969.2	13.6	30	wnw.	4.0	656	939.5	9.9	1.31	37	4.51	wnw.	7.0	643	0	
						750	929.0	9.0	.....	37	4.25	wnw.	7.6	735	0	
2:18	969.2	13.7	30	nw.	4.5	989	902.4	6.8	0.89	38	3.75	nw.	9.0	970	0	
						750	929.0	8.8	.....	38	4.31	nw.	7.6	735	0	
2:22	969.2	13.7	30	nw.	4.0	646	940.8	9.7	1.64	38	4.57	nw.	7.0	633	0	
						500	956.9	12.1	.....	33	4.66	nw.	4.5	490	0	
2:46	969.0	13.8	30	nw.	2.7	396	969.0	13.8	.....	30	4.73	nw.	2.7	388	.....	5/10 Ci., wsw.

April 1, 1916 (No. 3).

P. M.																
3:13	968.8	14.6	30	nw.	2.7	396	968.8	14.6	.....	30	4.99	nw.	5.4	388	.....	5/10 Ci., wsw.
						500	956.6	13.1	.....	30	4.52	nw.	5.9	490	.....	
3:25	968.7	14.6	30	nw.	4.0	643	940.8	11.0	1.46	31	4.07	nw.	6.5	630	.....	
						750	928.5	10.1	.....	31	3.83	nw.	6.7	735	.....	
						1,000	901.1	8.1	.....	32	3.46	nnw.	6.9	980	.....	
3:40	968.6	14.6	30	nnw.	5.4	1,032	897.4	7.8	0.88	32	3.39	nnw.	7.0	1,012	.....	
						1,000	901.1	8.1	.....	33	3.56	nnw.	7.0	980	.....	
						750	928.5	10.5	.....	33	4.19	nnw.	7.0	735	.....	
3:50	968.6	14.6	30	nnw.	2.7	722	931.7	10.7	1.20	34	4.38	nnw.	7.0	708	.....	
						500	956.5	13.4	.....	32	4.92	nnw.	4.1	490	.....	
3:58	968.5	14.6	30	nnw.	2.7	396	968.5	14.6	.....	30	4.99	nnw.	2.7	388	.....	7/10 Ci., wsw.

April 2, 1916 (No. 1).

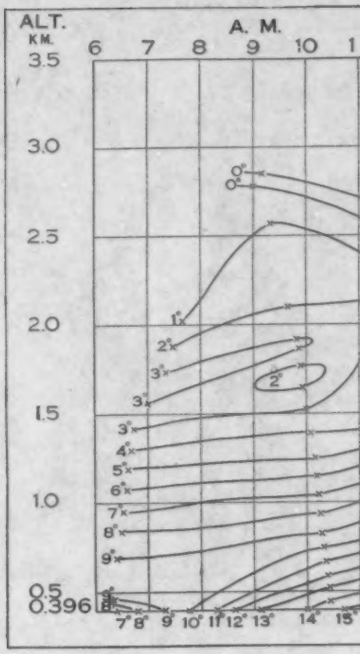
A. M.																
9:39	973.9	1.3	79	nne.	5.4	396	973.9	1.3	.....	79	5.30	nne.	5.4	388	.....	10/10 St., nne.
						500	961.1	−0.2	.....	84	5.05	nne.	6.2	490	0	Altitude of St. base about 800 m.
9:48	973.9	1.0	79	nne.	4.5	671	941.0	−2.6	1.42	92	4.53	nne.	7.4	658	0	
						750	931.4	−3.0	.....	91	4.32	nne.	7.3	735	0	
10:24	973.8	1.3	78	ne.	4.0	974	905.4	−4.3	0.58	88	3.75	nne.	6.9	955	0	
						750	931.4	−2.9	.....	87	4.18	ne.	7.1	735	0	
10:37	973.8	1.4	78	ne.	3.6	582	951.4	−1.9	1.83	87	4.54	ne.	7.2	571	0	Altitude of St. base about 800 m.
						500	961.1	−0.4	.....	83	4.91	ne.	5.8	490	0	
10:44	973.9	1.5	78	ne.	4.0	396	973.9	1.5	.....	78	5.31	ne.	4.0	388	.....	10/10 St., nne.

April 2, 1916 (No. 2).

A. M.																
10:50	973.7	1.6	77	ne.	5.4	396	973.7	1.6	.....	77	5.28	ne.	5.4	388	.....	10/10 St.Cu., nne.
						500	961.0	0.1	.....	78	4.80	ne.	6.1	490	0	Altitude of St.Cu. base about
11:12	973.5	2.1	74	nne.	4.0	624	946.2	−1.6	1.40	79	4.23	nne.	7.0	612	0	900 m.
						750	931.4	−2.4	.....	81	4.05	nne.	6.6	735	0	
P. M.																
12:03	973.3	2.7	73	nne.	4.0	972	905.4	−3.7	0.86	85	3.81	nne.	6.0	953	0	
						750	931.4	−1.2	.....	80	4.42	nne.	5.1	735	0	Altitude of St.Cu. base about
						500	960.8	1.5	.....	75	5.11	nne.	4.0	490	0	950 m.
12:14	973.1	2.7	73	nne.	3.6	396	973.1	2.7	.....	73	5.42	nne.	3.6	388	.....	10/10 St.Cu., nne.

April 2, 1916 (No. 3).

P. M.																
3:47	970.7	5.2	62	nne.	3.6	396	970.7	5.2	.....	62	5.49	nne.	3.6	388	.....	Cloudless.
						500	958.3	4.2	.....	65	5.36	nne.	5.7	490	0	
5:07	970.2	5.7	63	ne.	4.0	590	947.3	3.3	0.98	68	5.26	nne.	7.6	578	.....	
						750	929.2	1.8	.....	72	5.01	nne.	7.2	735	.....	
5:13	970.2	5.8	63	ne.	4.0	858	916.5	0.8	1.00	74	4.79	nne.	7.0	841	.....	
						750	929.2	2.0	.....	71	5.01	nne.	6.2	735	.....	
						500	958.0	4.7	.....	65	5.55	ne.	4.4	490	.....	
5:23	970.1	5.8	63	ne.	3.6	396	970.1	5.8	.....	63	5.81	ne.	3.6	388	.....	Few Ci.St., nw.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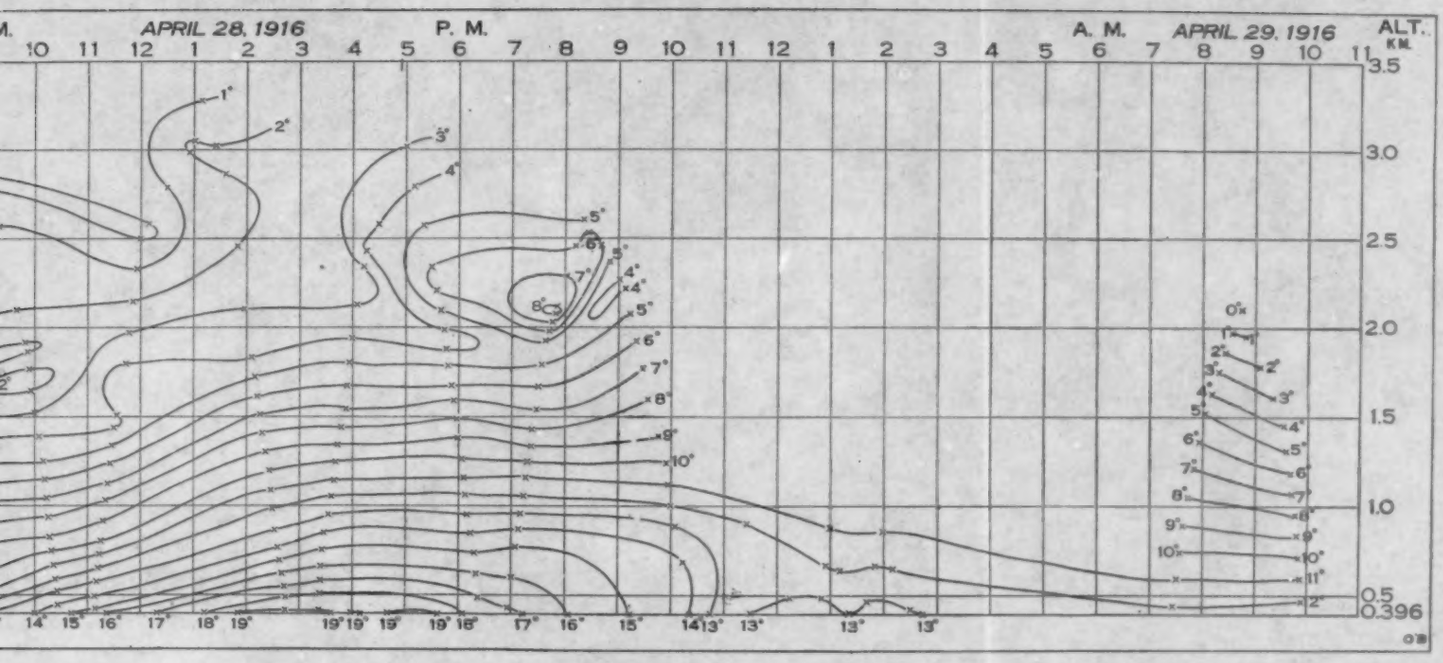
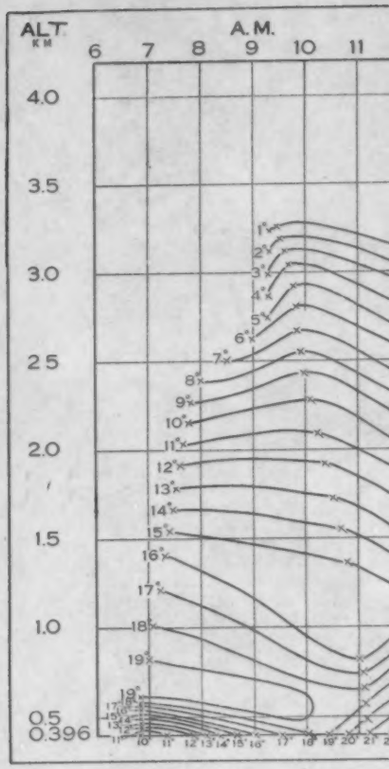


FIG. 1.—Free-air temperatures, °C, above Drexel Aerological Station; observed April 28–29, 1916.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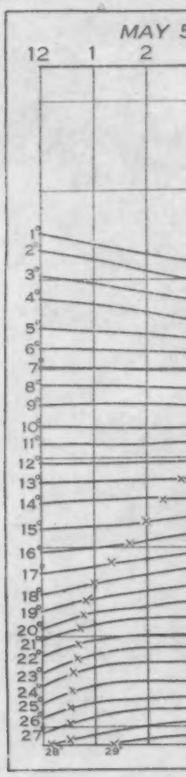
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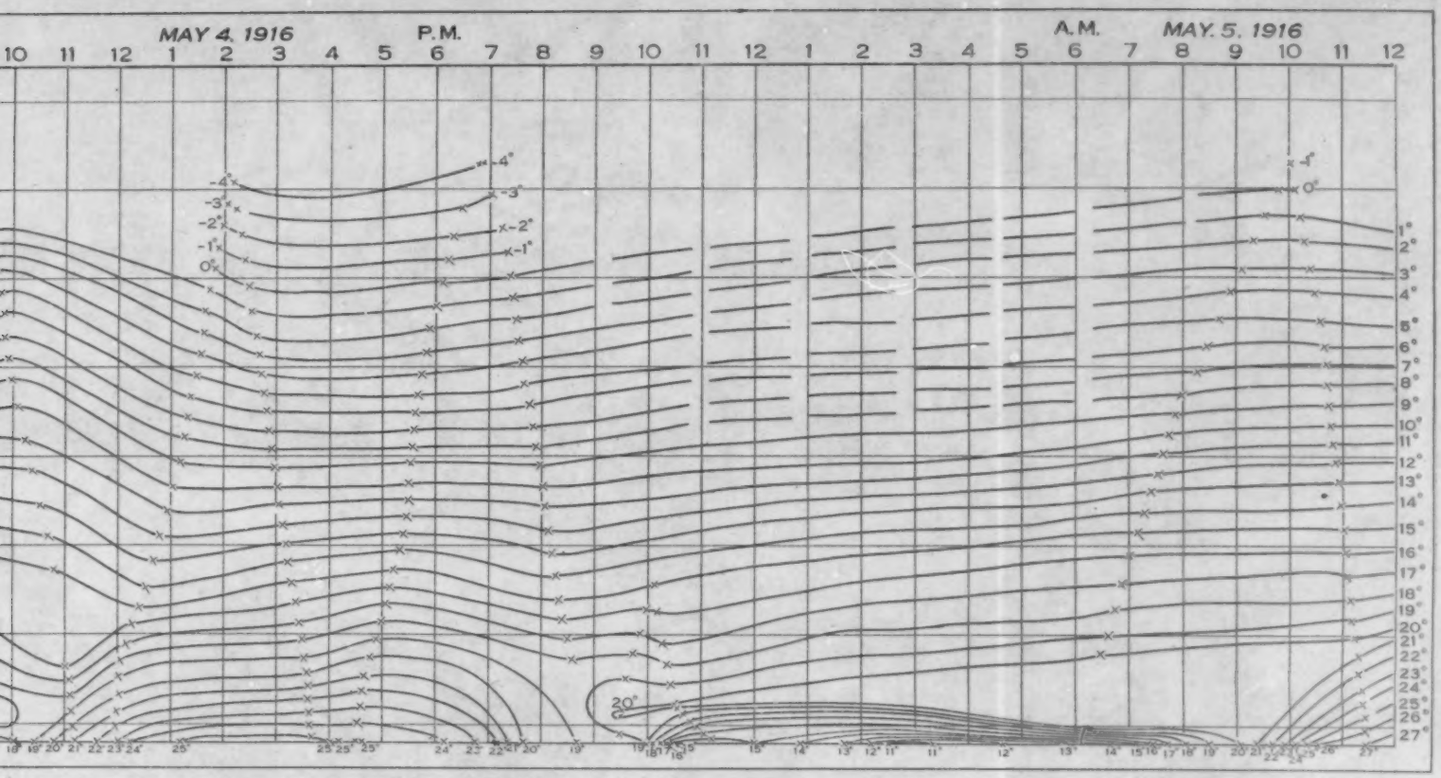


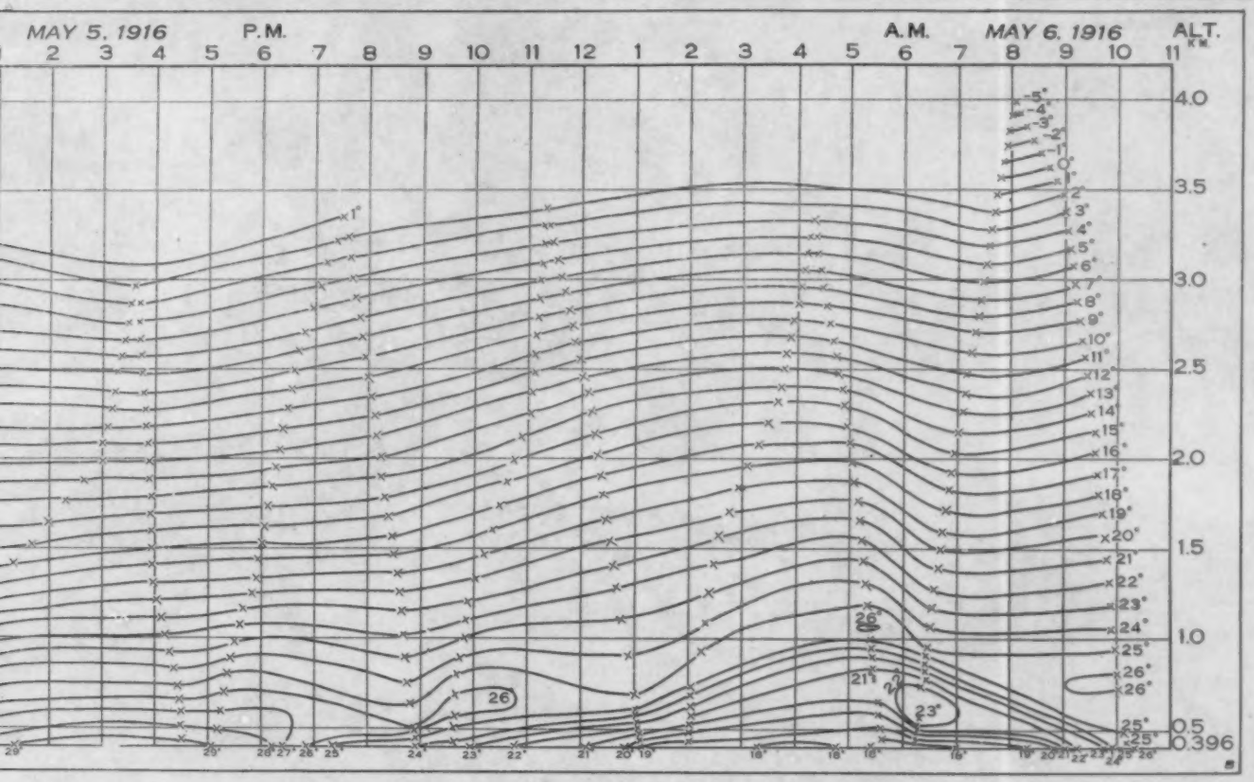
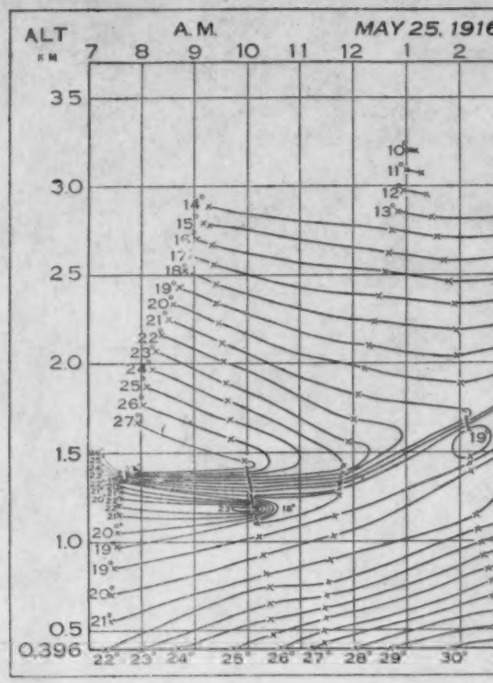
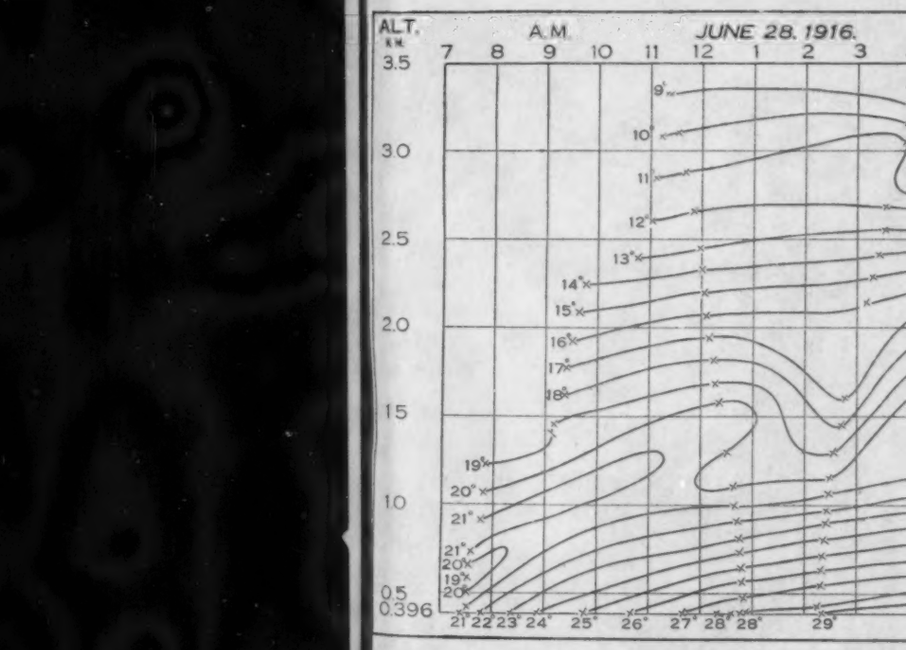


FIG. 2.—Free-air temperatures, °C, above Drexel Aerological Station; observed May 4–6, 1916.


ALT
KM
A.M.
MAY 25. 1916
7 8 9 10 11 12 1 2
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.396
22 23 24 25 26 27 28 29 30


ALT.
KM
A.M.
JUNE 28. 1916.
7 8 9 10 11 12 1 2 3
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.396
21 22 23 24 25 26 27 28 28 29

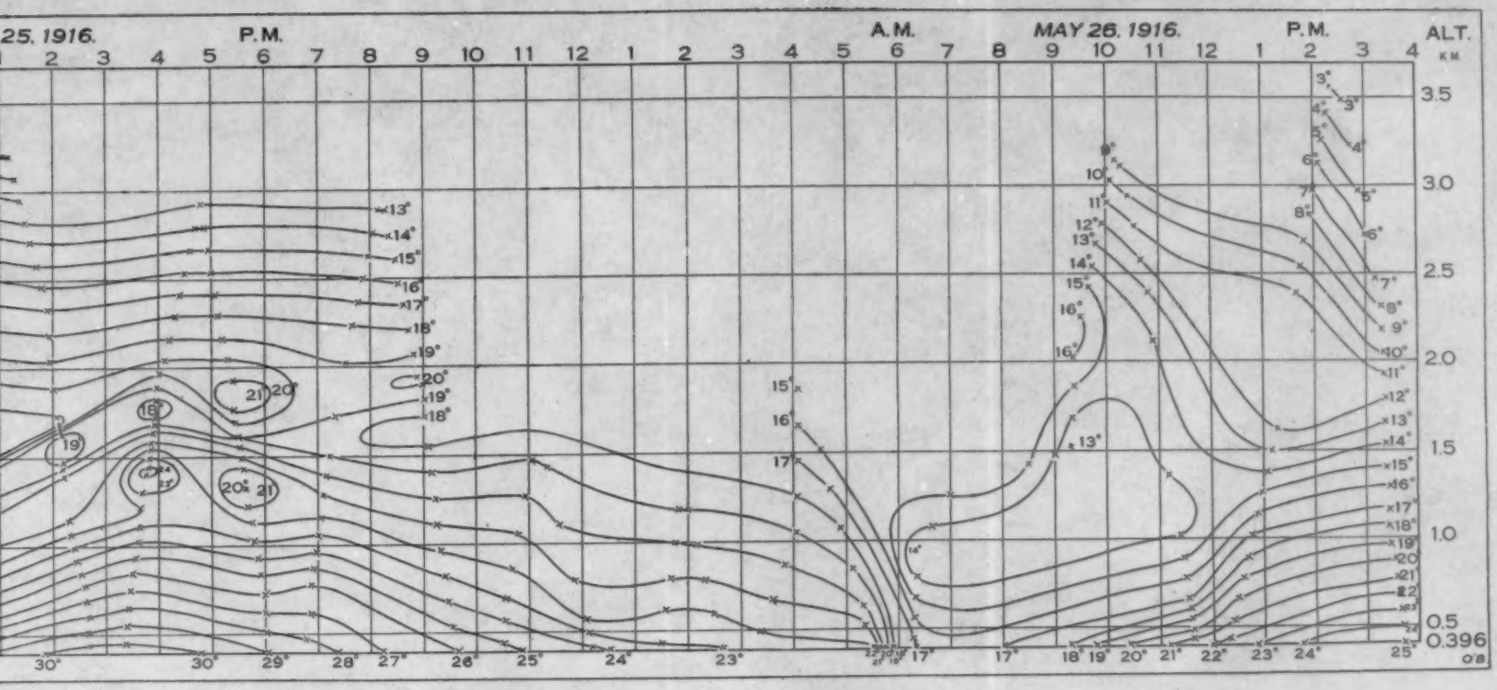


FIG. 3.—Free-air temperatures, °C, above Drexel Aerological Station; observed May 25–26, 1916.

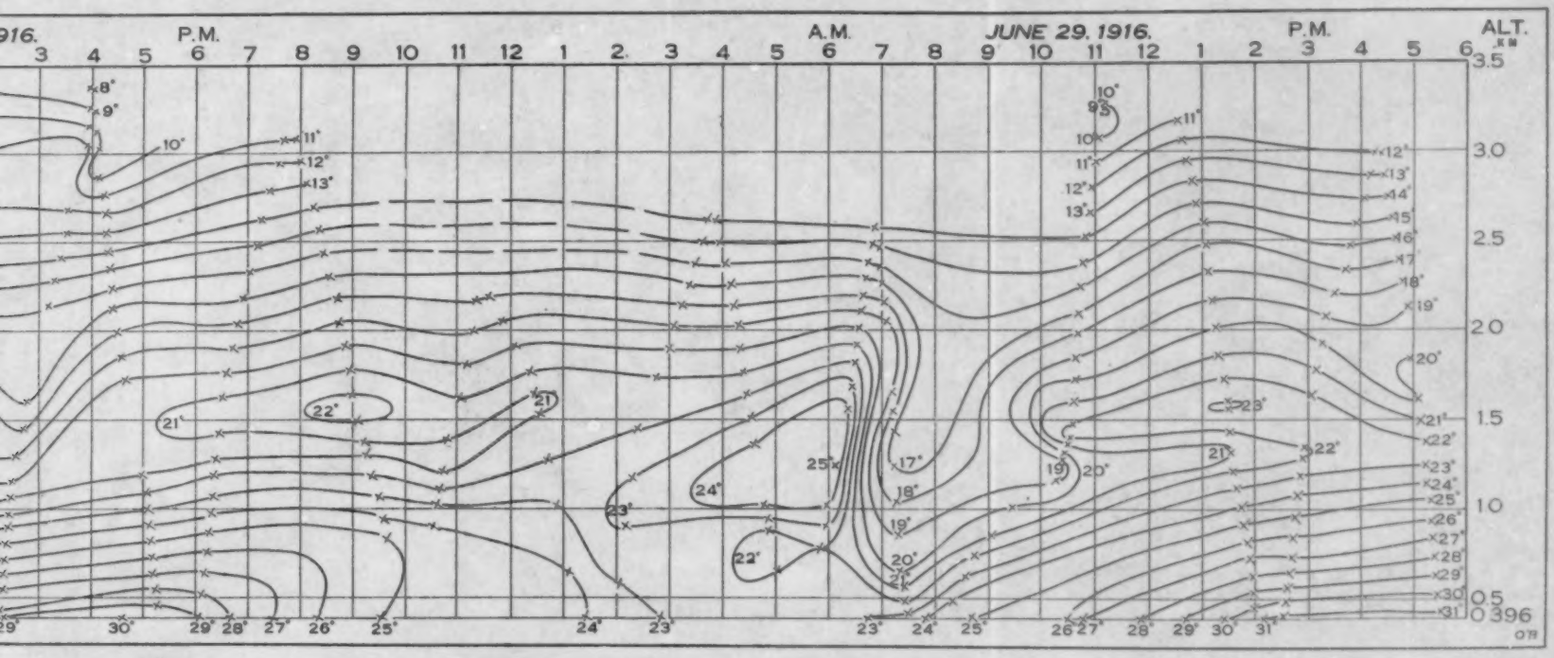


FIG. 4.—Free-air temperatures, °C, above Drexel Aerological Station; observed June 28–29, 1916.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 4, 1916.

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10⁵ ergs.*	*volts.*	
6:48	972.2	0.0	94	wsw.	4.5	396	972.2	0.0	.....	94	5.74	wsw.	4.5	388	.....	6/10 St.Cu., nnw.
						500	959.9	3.6	.....	90	7.12	sw.	8.8	490	0	
6:49	972.2	0.0	94	wsw.	5.4	530	956.3	4.7	−3.51	89	7.60	sw.	10.1	520	0	9/10 St.Cu., nnw.
7:13	972.4	−0.2	97	sw.	3.1	609	947.2	5.2	−0.63	69	6.11	nnw.	6.0	597	0	
						750	931.0	4.1	.....	69	5.65	nnw.	6.1	735	0	
						1,000	903.1	2.1	.....	70	4.98	nnw.	6.4	980	0	3/10 St.Cu., nnw.
7:57	972.9	1.6	91	w.	2.2	1,095	892.7	1.4	0.78	70	4.73	nnw.	6.5	1,073	0	
						1,250	875.9	0.0	.....	74	4.52	nw.	7.4	1,225	0	7/10 St.Cu., nnw.
8:53	973.5	3.9	83	nw.	1.8	1,358	864.5	−0.9	0.87	76	4.31	nw.	8.0	1,331	0	10/10 St.Cu., nw.
						1,500	849.4	−2.0	.....	79	4.08	nw.	7.6	1,470	0	
9:23	973.6	4.6	79	nw.	1.8	1,654	833.1	−3.1	0.83	82	3.86	nw.	7.1	1,621	0	8/10 St.Cu., wnw.
						1,500	849.4	−1.7	.....	78	4.13	nw.	6.8	1,470	0	
9:44	973.6	5.4	74	nnw.	1.3	1,359	864.5	−0.4	0.75	75	4.43	nw.	6.5	1,332	0	
						1,250	876.3	0.4	.....	72	4.53	nw.	7.0	1,225	0	
10:33	973.6	7.5	62	nnw.	2.2	1,013	902.7	2.2	0.88	66	4.73	nnw.	8.1	993	0	4/10A.Cu.,wnw.;6/10St.Cu.,wnw.
						1,000	904.1	2.3	.....	66	4.76	nnw.	8.0	980	0	
						750	932.0	4.5	.....	65	5.47	nnw.	5.6	735	0	
						500	961.0	6.7	.....	64	6.28	n.	3.2	490	0	
10:45	973.6	7.6	63	n.	2.2	396	973.6	7.6	.....	63	6.58	n.	2.2	388	.....	10/10 St.Cu., wnw.

April 5, 1916.

A. M.																
6:42	974.8	0.5	84	ne.	5.4	396	974.8	0.5	.....	84	5.32	ne.	5.4	388	.....	4/10A.St.,wsw.;5/10St.Cu.,wsw.
						500	962.0	0.0	.....	82	5.01	ne.	7.4	490	0	
						750	932.7	−1.3	.....	77	4.22	ne.	12.2	735	0	
6:56	975.0	0.7	81	ne.	4.5	847	921.5	−1.8	0.51	75	3.94	ne.	14.0	830	0	
7:11	975.1	0.7	80	ne.	5.4	826	924.0	0.6	.....	75	4.78	ne.	8.0	810	0	10/10 St.Cu., w.
						1,000	904.3	−1.0	.....	80	4.50	nne.	7.0	980	0	
7:33	975.4	0.8	80	nne.	4.0	1,171	885.1	−2.5	0.90	84	4.17	nne.	6.0	1,148	0	9/10 Ci.St., w.
						1,250	877.1	−3.1	.....	84	3.96	nne.	6.0	1,225	0	22°-halo, 7:30 to 8:11 a. m.
8:59	976.0	2.9	66	ne.	5.8	1,363	864.4	−4.0	0.61	83	3.63	nne.	6.0	1,336	0	
						1,250	877.2	−3.5	.....	83	3.78	nne.	8.6	1,225	0	9/10A.St.,wnw.;1/10St.Cu.,wnw.
10:55	976.6	3.5	58	ne.	7.6	1,135	890.1	−3.0	−0.90	82	3.90	n.	11.3	1,113	0	
10:59	976.6	3.5	58	ne.	8.5	1,013	903.9	−4.1	0.84	82	3.55	ne.	11.1	993	0	9/10 Ci.St.,wnw.;1/10A.St.,wnw.
						1,000	905.7	−4.0	.....	82	3.58	ne.	11.0	980	0	
11:02	976.6	3.1	58	ne.	7.6	751	934.2	−1.9	1.30	82	4.28	ne.	10.0	736	0	
						500	963.7	1.4	.....	64	4.33	nne.	8.6	490	0	
11:14	976.6	2.7	57	nne.	8.0	396	976.6	2.7	.....	57	4.23	nne.	8.0	388	.....	9/10A.St.,wnw.;1/10St.Cu.,wnw.

April 6, 1916 (No. 1).

A. M.																
7:07	980.1	−4.3	91	ne.	5.4	396	980.1	−4.3	.....	91	3.88	ne.	5.4	388	.....	6/10 Ci.,wnw.; 1/10 St. Cu.,wnw.
						500	967.1	−5.6	.....	87	3.31	ne.	6.5	490	0	
7:23	980.1	−3.9	82	ene.	5.4	628	951.6	−7.2	1.25	81	2.69	nne.	7.9	616	0	
7:52	980.1	−3.4	81	ene.	5.8	724	940.0	−5.1	−2.11	58	2.31	ne.	6.5	710	0	5/10 Ci., nw.; 2/10 Ci.St., wnw.; 1/10 St.Cu., wnw.
						750	936.7	−3.2	.....	57	2.25	nne.	6.3	735	0	
						1,000	907.3	−6.3	.....	52	1.87	nne.	4.6	980	0	
8:32	980.1	−2.7	69	ene.	6.3	1,056	901.0	−6.5	0.42	51	1.80	n.	4.2	1,035	0	22°-halo after 8:27 a. m.
8:40	980.1	−3.0	69	ene.	5.4	1,164	888.6	−6.2	0.48	54	1.95	nnw.	5.2	1,141	0	
						1,000	907.3	−7.3	.....	57	1.88	nne.	4.8	980	0	
9:21	980.1	−2.5	78	ne.	4.9	904	918.6	−8.0	0.87	58	1.80	ne.	4.5	886	0	
						750	936.7	−6.7	.....	66	2.29	ne.	4.9	735	0	
9:25	980.1	−2.1	75	ne.	4.5	618	952.9	−5.5	1.76	73	2.80	ne.	5.3	606	0	
						500	967.1	−3.4	.....	70	3.22	ne.	4.9	490	0	
9:28	980.1	−1.6	68	ne.	4.5	396	980.1	−1.6	.....	68	3.64	ne.	4.5	388	.....	9/10 Ci.St., wnw.

April 6, 1916 (No. 2).

P. M.																
12:51	977.9	1.5	65	ene	4.9	396	977.9	1.5	.....	65	4.43	ene.	4.9	388	.....	10/10 Ci.St.,wnw.
						500	965.0	−0.2	.....	61	3.67	ene.	4.9	490	.....	22°-halo.
1:20	977.5	1.8	59	ne.	4.9	642	947.8	−2.6	1.75	56	2.76	ne.	5.0	629	.....	
						500	964.0	0.0	.....	50	3.06	ne.	4.4	490	.....	
2:12	976.9	1.9	46	ne.	4.0	396	976.9	1.0	.....	46	3.22	ne.	4.0	388	.....	10/10 Ci.St., wnw.

April 7, 1916 (No. 1).

A. M.																
10:55	968.5	0.1	87	s.	4.0	396	968.5	0.1	.....	87	5.35	s.	4.0	388	.....	10/10 St., ssw.
						509	955.9	−0.8	.....	90	5.14	s.	4.4	490	.....	Altitude of St. base about 650 m.
11:16	968.5	0.4	87	s.	3.6	683	934.2	−2.4	1.01	95	4.75	ssw.	5.0	670	.....	
						500	955.9	−0.3	.....	91	5.42	ssw.	4.4	490	.....	
11:52	968.5	0.9	88	ssw.	4.0	396	968.5	0.9	.....	88	5.74	ssw.	4.0	388	.....	10/10 St., ssw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 7, 1916 (No. 2).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
3:38	968.0	1.2	100	w.	5.8	396	968.0	1.2	.....	100	6.66	w.	5.8	388	.....	10/10 St., w.
						500	955.2	0.5	.....	99	6.27	wnw.	5.6	490	0	Heavy snow.
						750	925.6	−1.2	.....	98	5.42	nw.	5.2	735	.....	Electric potential very variable, at times more than 10,000 volts.
						1,000	897.2	−2.9	.....	96	4.61	nnw.	4.8	980	.....	
4:16	968.2	0.4	100	nw.	2.2	1,028	894.4	−3.1	0.62	96	4.52	nnw.	4.8	1,008	.....	
						1,000	897.2	−2.9	.....	96	4.61	nnw.	4.6	980	.....	
						750	925.6	−1.6	.....	98	5.24	nnw.	3.0	735	.....	
						500	955.3	−0.2	.....	99	5.93	nw.	1.5	490	.....	
4:22	968.2	0.4	100	nw.	0.9	396	968.2	0.4	.....	100	6.29	nw.	0.9	388	.....	10/10 St., nnw.

April 8, 1916 (No. 1).

A. M.																
7:13	976.1	−1.8	98	n.	7.6	396	976.1	−1.8	.....	98	5.15	n.	7.6	388	.....	10/10 St.Cu., nne.
						500	963.3	−2.7	.....	98	4.78	n.	9.8	490	40	Altitude of St. Cu. base about 800 m.
7:22	976.4	−1.9	94	n.	5.8	738	935.0	−4.8	0.88	99	4.04	nne.	14.8	724	810	
						750	933.2	−4.9	.....	98	3.97	nne.	14.8	735	850	
						1,000	904.1	−6.3	.....	97	3.48	nne.	14.9	980	1,120	
7:31	976.5	−1.8	96	n.	6.3	1,238	877.2	−7.7	0.58	96	3.05	nne.	14.9	1,214	470	
						1,250	875.8	−7.8	.....	96	3.02	nne.	14.9	1,225	430	
						1,500	848.1	−9.4	.....	94	2.58	nne.	14.3	1,470	520	
						1,750	821.4	−11.0	.....	93	2.20	nne.	13.6	1,715	1,740	
						2,000	795.2	−12.6	.....	91	1.87	nne.	13.0	1,960	2,110	
8:13	977.2	−1.5	95	n.	5.8	2,027	792.6	−12.8	0.65	91	1.84	nne.	12.9	1,986	2,060	10/10 St., nne.
						2,250	769.9	−14.2	.....	91	1.62	nne.	11.9	2,205	2,290	
						2,500	744.9	−15.8	.....	90	1.38	nne.	10.8	2,450	2,670	
8:47	977.5	−1.3	92	n.	6.3	2,507	744.4	−15.8	0.66	90	1.38	nne.	10.8	2,457	2,700	Altitude of St. base about 1,000 m.
						2,500	744.9	−15.8	.....	90	1.38	nne.	10.8	2,450	2,610	
						2,250	769.9	−14.0	.....	91	1.65	nne.	12.3	2,205	1,950	
9:11	977.8	−1.0	92	n.	6.3	2,048	790.9	−12.6	0.58	91	1.87	nne.	13.5	2,007	1,880	
						2,000	795.2	−12.3	.....	91	1.92	nne.	13.3	1,960	1,860	
						1,750	821.7	−10.8	.....	92	2.23	nne.	12.0	1,715	1,550	
						1,500	849.3	−9.4	.....	93	2.55	nne.	10.8	1,470	570	
9:37	977.9	−0.8	89	n.	7.2	1,379	863.1	−8.7	0.70	94	2.74	nne.	10.2	1,352	705	Altitude of St. base about 1,350 m.
						1,250	877.9	−7.8	.....	94	2.96	nne.	10.2	1,225	420	
						1,000	906.4	−6.0	.....	95	3.50	n.	10.3	980	0	
						750	935.7	−4.3	.....	96	4.09	n.	10.4	735	0	
10:16	978.2	−1.2	100	n.	7.6	724	938.7	−4.1	0.88	96	4.16	n.	10.4	710	0	Some ice on wire.
						500	965.4	−2.1	.....	92	4.72	n.	7.9	490	0	
10:23	978.3	−1.2	90	n.	6.7	396	978.3	−1.2	.....	90	4.98	n.	6.7	388	.....	8/10 St. Cu., n.

April 8, 1916 (No. 2).

A. M.																
11:18	978.4	−0.2	85	n.	5.4	396	978.4	−0.2	.....	85	5.11	n.	5.4	388	.....	5/10 St.Cu., n.
						500	965.4	−1.2	.....	86	4.76	n.	7.2	490	0	
						750	935.5	−3.7	.....	89	3.99	n.	11.6	735	0	
11:27	978.4	0.0	83	n.	5.4	760	934.6	−3.8	0.99	89	3.95	n.	11.8	745	0	Altitude of St.Cu. base about 1,100 m.
						1,000	906.5	−5.7	.....	93	3.52	n.	13.4	980	0	
11:39	978.4	−0.2	83	n.	4.9	1,198	884.0	−7.2	0.78	97	3.22	n.	14.7	1,174	0	10/10 St.Cu., n.
						1,250	878.2	−7.6	.....	96	3.08	n.	.....	1,225	220	
						1,500	850.5	−9.2	.....	94	2.62	n.	.....	1,470	810	
P. M.																
12:04	978.4	0.4	83	n.	6.3	1,673	831.6	−10.4	0.67	92	2.31	n.	.....	1,640	800	
						1,750	823.7	−10.7	.....	92	2.24	n.	.....	1,715	910	
						2,000	797.1	−11.8	.....	92	2.03	n.	.....	1,960	.....	
1:13	978.4	1.0	79	n.	5.4	2,209	775.7	−12.7	0.50	92	1.88	n.	.....	2,165	.....	10/10 St.Cu., n.
						2,000	797.1	−11.5	.....	92	2.09	n.	.....	1,960	.....	
						1,750	823.7	−10.0	.....	92	2.39	n.	.....	1,715	.....	
1:28	978.4	1.2	75	n.	6.3	1,693	829.8	−9.7	0.79	92	2.46	n.	.....	1,659	.....	
						1,500	850.5	−8.2	.....	93	2.83	n.	.....	1,470	0	
						1,250	878.2	−6.2	.....	93	3.37	n.	.....	1,225	0	
1:46	978.4	−1.5	73	n.	6.3	1,044	901.8	−4.6	0.71	94	3.90	n.	.....	1,024	0	Snow flurry 1:49—1:58 p. m.
						1,000	906.5	−4.3	.....	93	3.96	n.	.....	980	0	
						750	935.5	−2.5	.....	92	4.56	n.	.....	735	0	
2:02	978.4	1.2	79	n.	5.8	621	951.2	−1.6	1.24	91	4.87	n.	.....	609	0	Some ice on wire.
						500	965.4	−0.1	.....	86	4.79	n.	.....	490	0	
2:07	978.4	1.2	82	n.	4.9	396	978.4	1.2	.....	82	5.26	n.	4.9	388	.....	9/10 St.Cu., n.

April 9, 1916.

A. M.																
7:06	975.6	−2.1	81	ssw.	4.9	396	975.6	−2.1	.....	81	4.16	ssw.	4.9	388	.....	7/10 Ci., nw.
						500	962.7	−1.5	.....	72	3.88	ssw.	6.1	490	0	
7:11	975.6	−1.9	77	ssw.	5.8	637	946.5	−0.7	−0.58	59	3.40	sw.	9.6	624	0	
						750	933.2	−1.2	.....	57	3.15	wsw.	10.2	735	0	
						1,000	904.7	−2.3	.....	54	2.72	wsw.	11.4	980	180	
7:30	975.4	−1.6	79	ssw.	5.8	1,222	879.2	−3.3	0.44	51	2.37	w.	12.5	1,198	380	
						1,250	876.2	−3.5	.....	51	2.33	w.	12.3	1,225	390	
						1,500	848.4	−5.2	.....	50	1.97	w.	10.1	1,470	530	
7:50	975.1	−1.0	82	ssw.	6.3	1,576	840.5	−5.7	0.68	50	1.89	w.	9.4	1,545	565	6/10 Ci., nw.
						1,750	822.0	−4.3	.....	40	1.70	w.	10.0	1,715	810	
						2,000	796.1	−2.3	.....	26	1.31	wnw.	10.9	1,960	1,090	
8:41	974.3	0.9	72	ssw.	8.5	2,141	782.4	−1.2	−0.80	18	1.00	wnw.	11.4	2,098	1,200	22°-halo, 8:37 to 8:48 a. m.
						2,250	761.5	−2.0	.....	18	1.00	wnw.	12.0	2,205	1,380	
						2,500	748.5	−4.0	.....	18	0.79	nw.	13.3	2,450	1,500	
9:00	974.0	1.6	70	ssw.	7.6	2,554	742.6	−4.4	0.77	18	0.76	nw.	13.6	2,503	1,500	5/10 Ci., nw.; 2/10 Ci. St., nw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 9, 1916—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10² ergs.*	*volts.*	
9:09	973.8	2.1	68	ssw.	8.5	2,729	726.3	−5.2	0.46	18	0.71	nw.	8.7	2,674	1,570	
						2,750	724.4	−5.3		18	0.70	nw.	8.9	2,694	1,590	2/10 Cl.St., nw.; 7/10 Cl.Cu., nw.
						3,000	701.6	−6.6		18	0.63	nw.	10.8	2,939	1,800	
						3,250	679.7	−7.9		18	0.56	nw.	12.7	3,184	2,000	
10:05	972.8	4.1	66	ssw.	10.7	3,356	670.2	−8.4	0.51	18	0.54	nw.	13.5	3,288	2,110	5/10 Cl.St., nw.; 3/10 Cl.Cu., nw.
						3,500	658.0	−9.6		18	0.48	nw.	14.1	3,429	2,280	
						3,750	636.8	−11.7		18	0.40	nw.	15.2	3,673	2,560	
						4,000	616.2	−13.8		18	0.33	nw.	16.3	3,918		6/10 Cl., nw.; 1/10 Cl.St., nw.
10:57	972.2	5.8	64	ssw.	12.1	4,126	606.2	−14.8	0.78	18	0.30	nw.	16.8	4,041		
						4,000	616.2	−13.9		18	0.33	nw.	16.6	3,918		
						3,750	636.2	−12.0		18	0.39	nw.	16.3	3,673		22°-halo, 11:10 to 11:21 a. m.
11:30	971.4	6.3	61	ssw.	10.7	3,500	656.8	−10.2		18	0.46	nw.	16.0	3,429	1,700	
						3,348	670.2	−9.1	0.77	18	0.51	nw.	15.8	3,290	1,680	
						3,250	678.4	−8.3		18	0.54	nw.	15.4	3,184	1,630	
						3,000	700.5	−6.4		18	0.64	nw.	14.3	2,939	1,500	
						2,750	723.5	−4.5		18	0.75	wnw	13.2	2,694	1,350	
						2,500	747.7	−2.6		18	0.80	wnw.	12.1	2,450	1,200	
11:49	970.9	7.0	57	ssw.	11.6	2,388	757.4	−1.7	0.36	18	0.95	wnw.	11.6	2,340	1,140	3/10 Cl., nw.; 2/10 Cl.St., nw.
						2,250	760.5	−1.2		18	1.00	w.	11.5	2,205	1,050	
						2,000	794.5	−0.3		18	1.07	w.	11.3	1,960	980	
						1,750	820.0	0.6		18	1.15	wsw.	11.1	1,715	790	
NOON	970.6	7.0	55	ssw.	11.2	1,720	823.2	0.7	−0.63	18	1.16	wsw.	11.1	1,686	700	
P. M.																
						1,500	846.1	−0.7		18	1.04	wsw.	12.6	1,470	460	
						1,250	873.0	−2.3		18	0.91	sw.	14.2	1,225	50	
12:12	970.3	7.8	53	ssw.	10.7	1,243	873.8	−2.3	1.12	18	0.91	sw.	14.3	1,219	40	3/10 Cl., nw.
						1,000	900.4	0.4		31	1.95	ssw.	13.2	980	0	
12:25	970.0	8.6	50	ssw.	13.4	807	922.4	2.6	1.31	41	3.02	ssw.	12.4	791	0	
						750	928.3	3.3		42	3.25	ssw.	12.4	735	0	
						500	957.1	6.6		47	4.58	ssw.	12.2	490	0	
12:30	969.9	8.0	49	ssw.	12.1	396	969.9	8.0		49	5.26	ssw.	12.1	388		4/10 Cl.St., nw.

April 10, 1916.

A. M.																
7:21	965.7	3.8	85	w.	1.8	396	965.7	3.8		85	6.82	w.	1.8	388		8/10 Cl., w.
						500	953.1	5.5		78	7.04	wnw.	3.1	490	0	
						750	924.2	9.5		62	7.36	nnw.	6.3	735	0	
7:27	965.7	4.6	81	wnw.	1.8	865	912.4	11.4	−1.62	54	7.28	n.	7.7	848	0	
						1,000	897.0	10.5		50	6.35	nnw.	7.8	980	0	
						1,250	871.1	8.8		43	4.87	nnw.	8.0	1,225	0	
7:53	965.8	6.6	75	w.	1.8	1,340	862.0	8.2	0.67	40	4.35	nw.	8.1	1,314	0	
8:00	965.8	6.5	74	w.	1.8	1,492	846.2	8.2	0.00	36	3.91	nw.	11.2	1,463	0	
						1,500	845.8	8.1		36	3.80	nw.	11.2	1,470	0	2/10 Ci., w.
						1,750	820.7	5.8		40	3.69	nw.	12.3	1,715	60	
						2,000	796.1	3.5		44	3.45	nw.	13.3	1,960	480	
						2,250	772.0	1.2		48	3.20	nw.	14.4	2,205	890	
8:28	966.0	9.1	73	w.	1.8	2,382	759.1	0.0	0.92	50	3.06	nw.	14.9	2,334	1,105	
						2,500	747.9	−1.1		53	2.95	nw.	14.9	2,450	1,160	
						2,750	724.6	−3.3		59	2.74	nw.	14.8	2,694	1,250	
8:46	966.1	8.0	69	nw.	1.3	2,879	713.0	−4.5	0.91	62	2.60	nw.	14.7	2,821	1,300	2/10 Ci., w.
						3,000	702.4	−4.8		55	2.24	nw.	14.0	2,939	1,260	
						3,250	681.2	−5.5		41	1.57	nw.	12.5	3,184	1,220	
9:45	966.7	12.8	57	n.	0.9	3,311	676.1	−5.7	0.28	37	1.40	nw.	12.1	3,244	1,200	2/10 Ci., w.; 2/10 Cl.St., w.
						3,500	660.3	−5.8		31	1.16	nw.	13.7	3,429	1,340	22°-halo, 10:30 to 10:58 a. m.
10:44	966.6	14.6	48	ese.	1.3	3,691	644.4	−5.9	0.14	24	0.89	nw.	15.4	3,615		
						3,500	660.3	−5.5		24	0.92	nw.	14.2	3,429		4/10 Cl.St., nw.
						3,250	681.8	−4.9		24	0.97	nw.	12.6	3,184	750	
						3,000	703.5	−4.3		24	1.02	nw.	11.0	2,939	460	
11:10	966.4	15.7	44	se.	1.8	2,872	714.7	−4.0	0.96	24	1.05	nw.	10.2	2,814	480	
						2,750	725.7	−2.8		24	1.16	nw.	10.2	2,694	500	
11:22	966.2	16.2	42	ene.	1.3	2,674	732.6	−2.1	1.02	24	1.23	nw.	10.2	2,620	510	4/10 Ci., nnw.; 1/10 Cl.St., nnw.
						2,500	748.5	−0.3		30	1.79	nw.	10.0	2,450	530	
						2,250	772.0	2.2		38	2.72	nw.	9.6	2,205		
						2,000	796.1	4.8		46	3.96	nw.	9.3	1,960		
11:45	966.0	16.6	39	ne.	1.8	1,937	802.9	5.4	0.78	48	4.31	nw.	9.2	1,898		
						1,750	820.7	6.9		47	4.68	wnw.	10.3	1,715		
11:56	965.8	17.0	38	se.	1.3	1,539	842.6	8.5	−0.05	46	5.11	w.	11.6	1,508		
						1,500	845.8	8.5		46	5.11	w.	10.9	1,470		
11:58	965.8	16.9	38	sse.	1.3	1,349	862.0	8.4	0.86	46	5.07	w.	8.4	1,322		
						1,250	871.1	9.3		45	5.27	w.	7.7	1,225		
						1,000	897.0	11.4		42	5.66	wsw.	5.8	980		
						750	924.2	13.6		39	6.08	sw.	4.0	735		
						500	953.1	15.7		36	6.42	ssw.	2.1	490		
P. M.																
12:04	965.8	16.6	35	s.	1.3	396	965.8	16.6		35	6.61	s.	1.3	388		2/10 Ci., n.; 7/10 Cl.St., n.

April 11, 1916 (No. 1).

A. M.																
9:39	966.7	19.0	35	se.	8.9	396	966.7	19.0		35	7.69	se.	8.9	388		Few Ci., nw.
						500	955.0	18.5		36	7.67	se.	9.1	490	0	
						750	927.1	17.2		37	7.26	se.	9.7	735	0	
9:46	966.6	19.4	34	ese.	8.9	831	918.6	16.8	0.51	38	7.27	se.	9.9	815	0	
10:07	966.4	20.5	35	se.	8.9	968	903.8	17.0	−0.15	36	6.98	s.	6.5	949	0	
						1,000	900.1	16.9		36	6.93	s.	6.9	980	0	
						1,250	874.0	15.8		36	6.46	s.	10.2	1,225	150	
						1,500	848.5	14.8		35	5.89	ssw.	13.5	1,470	410	

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 11, 1916 (No. 1)—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10⁶ ergs.*	*volts.*	
10:20	966.3	21.0	35	ese.	10.3	1,679	831.2	14.1	0.41	35	5.63	ssw.	15.8	1,646	590	1/10 Ci., nw.; 2/10 Ci.Cu.,wnw.; 3/10A. Cu., w.
						1,750	824.0	13.6		36	5.61	ssw.	15.8	1,715	630	
						2,000	790.7	11.7		40	5.50	ssw.	15.7	1,960	760	
						2,250	776.2	9.8		43	5.21	ssw.	15.6	2,205	890	
10:43	966.0	21.6	33	se.	9.8	2,468	756.4	8.1	0.76	46	4.97	ssw.	15.5	2,418	1,000	
						2,500	753.1	7.9		46	4.90	ssw.	15.4	2,450	1,010	
						2,750	730.8	6.7		48	4.71	sw.	14.9	2,694	1,050	
						3,000	709.1	5.6		49	4.46	sw.	14.3	2,939	1,090	
						3,250	687.9	4.4		51	4.27	wsw.	13.8	3,184	1,310	
11:25	965.7	23.3	30	se.	7.2	3,348	680.0	3.9	0.48	52	4.20	wsw.	13.6	3,280	1,400	Few Ci., wnw.
						3,500	667.1	2.7		55	4.08	wsw.	14.1	3,429	1,450	
						3,750	646.8	0.8		60	3.88	wsw.	14.9	3,673	1,530	
						4,000	626.7	−1.0		65	3.65	wsw.	15.7	3,918	1,610	
P. M.																
12:15	965.2	24.8	32	sse.	5.4	4,250	607.9	−3.0	0.76	70	3.32	wsw.	16.5	4,162	1,690	
						4,500	589.2	−4.8		79	3.22	wsw.	18.7	4,407	2,670	
12:33	964.8	25.5	34	s.	8.5	4,623	580.2	−5.7	0.73	83	3.14	wsw.	19.8	4,527	1,800	
						4,500	589.2	−4.8		82	3.35	wsw.	19.1	4,407	1,690	
						4,250	607.9	−3.0		81	3.85	wsw.	17.7	4,162	1,440	
						4,000	626.7	−1.1		80	4.46	sw.	16.3	3,918	1,200	
						3,750	646.8	0.8		78	5.05	sw.	14.9	3,673	950	
						3,500	667.1	2.6		77	5.75	sw.	13.5	3,429	640	
1:30	963.6	27.3	39	s.	10.3	3,403	675.2	3.3	0.84	76	5.88	sw.	13.0	3,334	500	Few Ci., wnw.
						3,250	687.9	4.6		72	6.11	sw.	13.6	3,184	280	
						3,000	709.1	6.7		66	6.47	sw.	14.5	2,939	0	
						2,750	730.8	8.8		60	6.80	ssw.	15.4	2,694	0	
1:55	963.3	28.6	25	ssw.	12.5	2,577	746.6	10.2	−0.91	56	6.97	ssw.	16.0	2,525	0	
						2,500	753.1	9.5		55	6.53	s.	17.9	2,450	0	
1:58	963.2	28.7	24	s.	14.3	2,467	756.4	9.2	0.90	54	6.29	s.	18.7	2,417	0	
						2,250	776.2	11.1		52	6.87	s.	18.2	2,205	0	
						2,000	799.7	13.4		50	7.68	s.	17.7	1,960	0	
						1,750	823.9	15.6		47	8.33	s.	17.2	1,715	0	
2:15	962.8	28.6	21	s.	15.6	1,618	836.4	16.8	0.85	46	8.80	s.	16.9	1,586	0	1/10 Ci., wnw.
						1,500	848.2	17.8		42	8.56	s.	16.9	1,470	0	
2:27	962.6	28.6	22	s.	12.1	1,371	860.8	18.9	1.00	38	8.30	s.	17.0	1,344	0	
						1,250	873.2	20.1		36	8.47	s.	17.0	1,225	0	
						1,000	898.3	22.6		32	8.78	sse.	17.0	980	0	
2:40	962.3	28.8	22	ssw.	15.2	823	916.7	24.4	1.12	29	8.87	sse.	17.0	807	0	
						750	924.5	25.2		28	8.98	sse.	16.4	735	0	
						500	950.7	27.9		24	9.02	s.	14.3	490	0	
2:44	962.2	29.0	23	s.	13.4	396	962.2	29.0		23	9.22	s.	13.4	388		5/10 Ci., wnw.

April 11, 1916 (No. 2).

P. M.																
3:37	961.2	29.2	24	ssw.	13.4	396	961.2	29.2		24	9.73	ssw.	13.4	388		4/10 Ci., w.
						500	949.6	27.8		25	9.34	ssw.	14.2	490	0	
						750	922.5	24.3		26	7.90	s.	16.0	735	0	
3:45	961.0	29.1	24	s.	12.5	765	920.4	24.1	1.38	26	7.81	s.	16.1	750	0	
						1,000	896.2	21.6		31	8.00	ssw.	16.7	980	0	
3:57	960.8	29.2	23	ssw.	14.8	1,106	885.8	20.4	1.09	33	7.91	ssw.	17.0	1,084	0	
						1,250	870.8	19.0		35	7.69	ssw.	17.0	1,225	0	
						1,500	845.9	16.5		39	7.32	ssw.	16.9	1,470	0	
4:08	960.7	29.0	22	ssw.	10.7	1,596	836.4	15.5	1.00	40	7.04	ssw.	16.9	1,564	0	
						1,750	821.2	14.4		41	6.72	ssw.	17.5	1,715	0	
						2,000	796.9	12.7		43	6.32	ssw.	18.5	1,960	0	
						2,250	773.5	10.9		45	5.87	sw.	19.5	2,205	0	
						2,500	750.7	9.2		46	5.35	sw.	20.5	2,450	0	
4:36	960.4	28.6	22	ssw.	13.9	2,564	745.0	8.8	0.69	46	5.21	sw.	20.8	2,512	0	7/10 Ci., w.
						2,750	728.8	7.2		48	4.88	sw.	20.8	2,694	0	
						3,000	707.0	5.1		51	4.48	sw.	20.9	2,939	0	
4:57	960.1	28.2	22	ssw.	12.5	3,122	696.3	4.1	0.92	52	4.26	sw.	20.9	3,059	0	
						3,000	707.0	5.3		50	4.46	sw.	21.4	2,939	0	
						2,750	728.8	7.8		46	4.87	sw.	22.4	2,694	0	
						2,500	750.7	10.4		43	5.42	sw.	23.3	2,450	0	
						2,250	773.5	12.9		39	5.80	sw.	24.3	2,205	0	
5:34	959.7	28.0	24	s.	8.9	2,178	780.0	13.6	0.50	38	5.92	sw.	24.6	2,135	0	
						2,000	796.9	14.5		40	6.60	sw.	23.1	1,960	0	
						1,750	820.8	15.8		42	7.54	ssw.	20.9	1,715	0	
5:45	959.6	27.5	26	s.	12.5	1,624	833.0	16.4	1.06	43	8.02	ssw.	19.8	1,602	0	8/10 Ci., w.
						1,500	845.3	17.7		42	8.50	ssw.	19.8	1,470	0	
						1,250	870.3	20.4		41	9.83	ssw.	19.8	1,225	0	
5:54	959.5	27.1	27	s.	10.3	1,201	875.1	20.9	0.95	40	9.89	ssw.	19.8	1,177	0	
						1,000	895.8	22.8		37	10.27	ssw.	19.5	980	0	
6:03	959.4	26.7	28	s.	9.4	831	913.0	24.4	0.44	34	10.39	ssw.	19.2	815	0	
						750	921.4	24.8		33	10.33	ssw.	17.0	735	0	
						500	948.0	25.8		29	9.64	s.	10.4	490	0	
6:10	959.4	26.3	27	s.	7.6	396	959.4	26.3		27	9.25	s.	7.6	388		9/10 Ci., w.

April 12, 1916.

P. M.																
12:43	960.8	27.8	22	w.	13.0	396	960.8	27.8		22	8.22	w.	13.0	388		7/10 Ci., wsw.
						500	949.0	26.3		23	7.87	w.	13.7	490	0	
						750	922.1	22.6		25	6.86	w.	15.5	735	0	
12:50	960.8	28.0	22	w.	11.6	819	915.2	21.6	1.47	25	6.45	w.	16.0	803	0	
						1,000	896.0	19.7		27	6.20	w.	16.1	980	0	
						1,250	873.0	17.1		30	5.85	wsw.	16.2	1,225	0	
						1,500	844.9	14.5		32	5.28	wsw.	16.4	1,470	0	
1:10	960.8	27.8	22	w.	11.6	1,548	840.4	14.0	1.04	33	5.27	wsw.	16.4	1,517	0	

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 12, 1916—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^8 *ergs.*	*volts.*	
						1,750	820.2	12.6	.....	32	4.67	wsw.	16.9	1,715	0	
						2,000	796.1	10.9	.....	31	4.04	wsw.	17.5	1,960	20	
						2,250	772.5	9.1	.....	30	3.47	w.	18.2	2,205	240	
						2,500	749.6	7.4	.....	29	2.99	w.	18.8	2,450	450	
1:42	960.8	28.3	19	wsw.	13.4	2,637	737.4	6.4	0.70	28	2.69	w.	19.2	2,584	570	
						2,750	727.2	5.3	.....	28	2.49	w.	19.6	2,694	660	
2:00	960.8	28.6	19	wsw.	10.7	3,000	705.2	2.8	.....	27	2.02	w.	20.6	2,939	740	
						3,115	695.2	1.7	0.98	27	1.87	w.	21.0	3,052	780	
2:23	960.7	28.6	19	w.	10.3	3,250	684.0	0.8	.....	27	1.75	w.	23.2	3,184	860	
						3,474	665.0	−0.6	0.61	28	1.63	wsw.	27.0	3,403	1,000	5/10 Ci., wsw.
						3,250	684.0	0.7	.....	32	2.06	wsw.	24.1	3,184	490	
3:05	960.5	29.6	18	w.	9.4	3,000	705.2	2.2	.....	36	2.58	w.	20.8	2,939	410	
						2,807	722.7	3.3	1.00	39	3.02	w.	18.3	2,750	490	
						2,750	727.2	3.9	.....	39	3.15	w.	18.0	2,694	460	
						2,500	749.6	6.4	.....	40	3.84	w.	16.8	2,450	310	
						2,250	772.9	8.9	.....	41	4.67	wsw.	15.7	2,205	160	
						2,000	796.9	11.4	.....	42	5.66	wsw.	14.5	1,960	10	
3:22	960.5	29.3	17	w.	11.6	1,979	799.1	11.6	1.07	42	5.74	wsw.	14.4	1,940	0	3/10 Ci., wsw.
						1,750	821.2	14.1	.....	38	6.11	wsw.	14.5	1,715	0	
						1,700	845.2	16.8	.....	33	6.31	w.	14.6	1,470	0	
						1,250	870.3	19.4	.....	28	6.31	w.	14.6	1,225	0	
3:45	960.5	29.6	17	w.	10.3	1,186	877.3	20.1	1.07	27	6.35	w.	14.6	1,163	0	
						1,000	896.0	22.1	.....	25	6.65	wsw.	13.8	980	0	
3:55	960.5	29.5	16	w.	10.7	839	913.3	23.8	1.22	23	6.78	wsw.	13.2	823	0	
						750	922.1	24.9	.....	22	6.93	wsw.	12.8	735	0	
						500	949.0	27.9	.....	18	6.77	wsw.	11.7	490	0	
4:00	960.5	29.2	17	wsw.	11.2	396	960.5	29.2	.....	17	6.89	wsw.	11.2	388	.....	1/10 Ci., wsw.

April 13, 1916 (No. 1).

A. M.																
7:13	971.4	10.0	75	nnw.	4.5	396	971.4	10.0	.....	75	9.21	nnw.	4.5	388	.....	10/10 St.Cu., wsw.
						500	959.2	9.3	.....	76	8.91	n.	6.7	490	0	
						750	930.4	7.6	.....	78	8.14	n.	12.0	735	0	
7:22	971.6	9.9	76	n.	4.5	865	917.9	6.8	0.68	79	7.81	nne.	14.6	848	0	
						1,000	902.8	6.2	.....	75	7.11	nne.	13.9	980	0	
						1,250	875.9	5.0	.....	68	5.93	n.	12.6	1,225	0	
						1,500	849.5	3.9	.....	62	5.01	n.	11.4	1,470	0	Light rain after 7:57 a. m.
8:01	972.0	9.6	77	n.	4.0	1,513	848.6	3.8	0.46	62	4.97	n.	11.3	1,483	0	
9:43	971.2	9.2	81	n.	4.0	1,657	833.0	5.0	−0.26	74	6.45	n.	5.0	1,624	.....	
						1,500	849.5	5.5	.....	63	5.69	n.	7.9	1,470	0	
9:53	971.3	9.4	78	n.	4.0	1,323	867.8	6.0	−1.21	51	4.77	n.	11.1	1,297	0	
						1,250	875.9	5.1	.....	51	4.48	n.	11.4	1,225	0	
9:58	971.3	9.4	78	n.	4.0	1,240	876.6	5.0	0.28	51	4.45	n.	11.5	1,216	0	
						1,000	902.8	5.7	.....	64	5.86	n.	11.2	980	0	
10:11	971.5	9.6	77	n.	3.6	848	919.7	6.1	0.77	72	6.78	n.	11.0	831	0	
						750	930.4	6.9	.....	73	7.26	n.	9.3	735	0	
						500	959.2	8.8	.....	76	8.61	n.	4.9	490	0	
10:18	971.6	9.6	77	n.	3.1	396	971.6	9.6	.....	77	9.20	n.	3.1	388	.....	10/10 St.Cu., wsw.

April 13, 1916 (No. 2).

P. M.																
1:29	970.8	10.4	66	nnw.	4.0	396	970.8	10.4	.....	66	8.32	nnw.	4.0	388	.....	10/10 St.Cu., wsw.
						500	958.3	9.5	.....	68	8.07	nnw.	5.1	490	0	Rain ended 1:30 p. m.
						750	930.0	7.2	.....	72	7.32	nnw.	7.9	735	0	
1:37	970.7	10.6	68	nnw.	4.5	836	920.5	6.4	0.91	74	7.11	nnw.	8.8	820	0	
						1,000	902.3	5.4	.....	72	6.46	nnw.	9.4	980	0	
						1,250	874.9	3.9	.....	68	5.49	nnw.	10.2	1,225	0	
1:51	970.6	10.6	65	nnw.	4.0	1,276	872.0	3.7	0.61	68	5.41	nnw.	10.3	1,251	0	
						1,500	848.3	3.8	.....	62	4.97	nnw.	10.4	1,470	80	
2:11	970.5	10.7	68	nnw.	4.0	1,690	828.6	3.8	−0.02	56	4.49	nnw.	10.4	1,656	330	
						1,750	822.7	3.4	.....	56	4.37	nnw.	9.9	1,715	420	
						2,000	797.4	2.0	.....	58	4.09	nw.	7.9	1,960	650	
3:34	970.2	13.0	55	nnw.	4.0	2,204	777.7	0.8	0.58	60	3.88	nw.	6.3	2,160	755	
						2,250	773.1	0.5	.....	60	3.80	nw.	6.1	2,205	710	
						2,500	749.3	−1.3	.....	62	3.40	wnw.	4.9	2,450	560	
4:12	970.3	13.2	52	nnw.	3.6	2,519	747.8	−1.4	0.70	62	3.37	wnw.	4.8	2,468	.....	
4:13	970.3	13.2	52	nnw.	3.6	2,729	728.3	−1.4	0.00	74	4.03	w.	8.1	2,674	.....	Altitude of St.Cu. base about 2,700 m.
						2,750	726.8	−1.5	.....	76	4.10	w.	.....	2,694	.....	
						3,000	704.0	−2.7	.....	97	4.73	wsw.	.....	2,939	.....	
4:18	970.3	13.2	50	nw.	3.6	3,036	700.8	−2.9	0.39	100	4.80	wsw.	.....	2,974	.....	
						3,000	704.0	−2.8	.....	100	4.84	wsw.	.....	2,939	.....	
						2,750	726.8	−2.1	.....	99	5.08	w.	.....	2,694	710	
4:28	970.4	13.1	50	nw.	4.5	2,659	734.7	−1.8	−0.44	99	5.21	w.	.....	2,605	730	
						2,500	750.0	−2.5	.....	95	4.71	w.	.....	2,450	755	
4:31	950.4	13.1	49	nw.	5.4	2,432	756.1	−2.8	1.07	93	4.50	w.	.....	2,383	755	
						2,250	773.7	−0.9	.....	82	4.65	wnw.	.....	2,205	650	
4:40	970.5	13.0	48	nw.	3.6	2,188	779.4	−0.2	−0.54	78	4.69	nw.	.....	2,144	580	
						2,000	797.9	−1.2	.....	56	3.10	nw.	.....	1,960	320	
4:43	970.5	13.1	47	nw.	3.6	1,984	799.6	−1.3	0.88	54	2.96	nw.	.....	1,945	300	10/10 St.Cu., wsw.
						1,750	822.9	0.8	.....	56	3.62	nw.	.....	1,715	0	
						1,500	848.8	3.0	.....	59	4.47	nw.	.....	1,470	0	
5:00	970.6	13.2	47	nw.	3.6	1,350	865.0	4.3	1.03	61	5.07	nw.	11.0	1,323	0	
						1,250	875.2	5.3	.....	58	5.17	nw.	10.5	1,225	0	
						1,000	902.3	7.9	.....	50	5.32	nnw.	9.3	980	0	
5:13	970.6	13.4	48	nnw.	3.6	854	918.7	9.4	0.90	46	5.42	nnw.	8.6	837	0	
						750	930.0	10.3	.....	46	5.76	nnw.	7.8	735	0	
						500	958.3	12.6	.....	48	7.00	nnw.	5.7	490	0	
5:18	970.6	13.5	48	nnw.	4.9	396	970.6	13.5	.....	48	7.43	nnw.	4.9	388	.....	2/10 Ci.St.,w.;8/10St.Cu.,wsw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 14, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
7:11	977.1	1.4	91	ssw.	6.3	396	977.1	1.4	.....	91	6.15	ssw.	6.3	388	.....	3/10 Ci.St.,sw.;5/10 St.Cu., sw.
						500	964.3	1.3	.....	89	5.97	ssw.	6.0	490	.....	
7:33	977.2	2.0	91	sw.	4.5	600	952.8	1.2	0.27	88	5.86	s.	5.7	588	.....	
						500	964.3	1.6	.....	90	6.17	ssw.	4.4	490	.....	
7:41	977.3	2.1	92	sw.	3.1	396	977.3	2.1	.....	92	6.54	sw.	3.1	388	.....	6/10 Ci.St., sw.; 2/10 A.St., sw.

April 15, 1916 (No. 1).

A. M.																
7:15	964.9	8.4	80	se.	6.7	396	964.9	8.4	.....	80	8.82	se.	6.7	388	.....	10/10 St.Cu., se.
						500	952.5	7.5	.....	85	8.81	se.	8.7	490	0	
						750	923.8	5.4	.....	95	8.52	se.	13.4	735	0	
7:26	964.7	8.6	78	se.	7.2	832	914.8	4.7	0.85	99	8.45	se.	14.9	816	10	
7:28	964.7	8.7	78	se.	7.2	998	896.5	6.8	−1.27	100	9.88	s.	17.7	978	180	10/10 St.Cu., s.
7:32	964.6	8.7	78	se.	7.6	1,230	871.4	6.0	0.34	100	9.35	s.	19.2	1,206	410	Altitude of St.Cu. base about 1,200 m.
						1,250	869.2	6.2	.....	100	9.48	s.	19.0	1,225	2,000	
7:41	964.4	8.4	83	se.	9.4	1,501	843.1	9.0	−1.11	100	11.48	ssw.	16.0	1,471	.....	Rain began 7:43 a. m.
7:44	964.4	8.0	88	se.	7.2	1,656	827.5	8.5	0.32	100	11.10	ssw.	17.4	1,623	.....	
																No record of descent.

April 15, 1916 (No. 2).

P. M.																
3:51	960.2	12.4	91	sse.	4.0	396	960.2	12.4	.....	91	13.10	sse.	4.0	388	.....	10/10 St., sse.
						500	948.1	10.7	.....	93	11.97	sse.	5.7	490	0	
4:02	960.1	12.0	96	sse.	5.4	527	945.2	10.3	1.60	93	11.65	sse.	6.1	517	0	Altitude of St. base about 500 m.
						750	920.0	8.9	.....	95	10.83	s.	7.1	735	0	
						1,000	892.5	7.3	.....	97	9.92	s.	8.3	980	0	
4:19	960.2	11.9	94	s.	5.4	1,110	880.9	6.6	0.63	98	9.56	ssw.	8.8	1,088	0	
						1,250	865.8	5.4	.....	99	8.88	ssw.	9.2	1,225	0	Higher St. moving from s.
4:30	960.3	12.2	91	s.	3.1	1,447	845.5	3.8	0.83	100	8.02	s.	10.7	1,418	120	
						1,500	839.9	3.3	.....	100	7.74	s.	11.2	1,470	160	
						1,750	814.1	0.8	.....	100	6.47	sse.	13.8	1,715	.....	
4:53	960.5	12.6	83	s.	9.8	1,976	791.9	−1.4	0.98	100	5.44	sse.	16.1	1,937	.....	
																No record of descent.

April 16, 1916.

A. M.																
9:54	963.7	9.7	84	nw.	8.5	396	963.7	9.7	.....	84	10.10	nw.	8.5	388	.....	10/10 St.Cu., nw.
						500	951.5	8.7	.....	88	9.90	nw.	8.6	490	0	
						750	923.0	6.5	.....	98	9.49	nw.	8.7	735	0	
10:02	963.8	9.7	82	nw.	8.5	811	916.4	5.9	0.92	100	9.29	nw.	8.7	795	0	Altitude of St.Cu. base about 850 m.
						1,000	895.7	3.9	.....	100	8.08	nw.	10.5	980	0	
10:07	963.9	9.8	81	nw.	10.7	1,091	885.6	3.0	1.04	100	7.58	nw.	11.4	1,070	0	
						1,250	868.9	2.3	.....	100	7.21	nw.	14.9	1,225	350	
10:22	964.2	10.6	78	nnw.	7.6	1,375	855.6	1.8	0.42	100	6.96	nw.	17.6	1,348	680	10/10 St.Cu., nw.
						1,500	842.4	1.2	.....	100	6.66	nw.	.....	1,470	.....	
						1,750	816.7	−0.1	.....	100	6.06	nw.	.....	1,715	.....	
						2,000	791.8	−1.4	.....	100	5.44	nw.	.....	1,960	.....	
10:36	964.4	10.6	78	nnw.	11.6	2,050	786.8	−1.7	0.54	100	5.30	nw.	.....	2,009	.....	
						2,000	791.8	−1.4	.....	99	5.39	nw.	.....	1,960	.....	
						1,750	816.7	0.0	.....	96	5.87	nw.	.....	1,715	1,000	
						1,500	843.0	1.4	.....	92	6.22	nw.	.....	1,470	710	
10:57	964.8	11.3	74	nnw.	8.5	1,316	862.6	2.4	0.92	89	6.46	nw.	.....	1,290	500	10/10 St.Cu., nw.
						1,250	869.9	3.0	.....	93	7.05	nw.	.....	1,225	400	
11:21	965.2	11.7	71	nw.	8.9	1,153	880.3	3.0	0.88	100	8.08	nw.	.....	1,130	270	Altitude of St.Cu. base about 1,100 m.
						1,000	897.1	5.3	.....	93	8.29	nw.	.....	980	120	
11:31	965.3	12.5	71	nnw.	11.6	745	925.6	7.5	1.40	81	8.40	nnw.	.....	730	0	
						500	953.2	10.9	.....	73	9.52	nw.	.....	490	0	
11:38	965.4	12.4	70	nw.	10.3	396	965.4	12.4	.....	70	10.08	nw.	10.3	388	.....	Few Ci., w.; 9/10 St.Cu., nw.

April 17, 1916.

P. M.																
1:14	974.2	17.2	32	sw.	4.9	396	974.2	17.2	.....	32	6.28	sw.	4.9	388	.....	4/10A.St.,wnw.;6/10St.Cu.,wnw.
						500	962.1	15.8	.....	33	5.92	sw.	5.7	490	0	
						750	933.5	12.3	.....	37	5.29	ssw.	7.6	735	0	
1:59	973.6	17.1	36	sw.	4.9	900	917.0	10.2	1.39	39	4.86	ssw.	8.8	882	0	
						1,000	905.5	9.2	.....	41	4.77	ssw.	8.7	980	0	
						1,250	879.0	6.6	.....	47	4.58	ssw	8.5	1,225	0	
						1,500	852.3	4.1	.....	53	4.34	s.	8.3	1,470	0	
						1,750	826.5	1.5	.....	59	4.02	s.	8.1	1,715	0	
2:36	973.2	16.8	38	sw.	9.8	1,811	820.1	0.9	1.02	60	3.91	s.	8.1	1,775	0	2/10A.St.,wnw.;8/10St.Cu.,wnw.
						2,000	801.0	0.0	.....	60	3.67	s.	7.4	1,960	0	
						2,250	776.3	−1.2	.....	60	3.32	ssw.	6.6	2,205	0	
						2,500	751.8	−2.4	.....	60	3.00	sw.	5.7	2,450	0	
3:44	972.4	16.4	38	sw.	7.2	2,506	751.2	−2.4	0.51	60	3.00	sw.	5.7	2,456	0	10/10 St. Cu., w.
						2,500	751.8	−2.4	.....	60	3.00	sw.	5.7	2,450	0	
						2,250	776.3	−1.0	.....	61	3.43	ssw.	6.8	2,205	0	
						2,000	801.0	0.4	.....	62	3.90	ssw.	7.8	1,960	0	
						1,750	826.1	1.8	.....	63	4.38	s.	8.9	1,715	0	
4:07	972.5	16.3	39	ssw.	8.0	1,656	835.5	2.3	1.05	64	4.61	s.	9.3	1,623	0	
						1,500	851.5	3.9	.....	64	5.17	s.	9.0	1,470	0	
						1,250	878.2	6.6	.....	63	6.14	s.	8.4	1,225	0	3/10 A.St., w.; 3/10 A.Cu., w.; 4/10 St.Cu., w.
						1,000	905.5	9.2	.....	63	7.33	s.	7.8	980	0	
4:29	973.6	15.8	45	ssw.	7.6	850	922.5	10.8	1.06	63	8.16	s.	7.5	833	0	
						750	933.5	11.9	.....	59	8.22	s.	7.3	735	0	
						500	962.1	14.5	.....	47	7.76	ssw.	6.9	490	0	
4:40	974.0	15.6	43	ssw.	6.7	396	974.0	15.6	.....	43	7.62	ssw.	6.7	388	.....	10/10 St.Cu., w.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 18, 1916.

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10⁵ ergs.*	*volts.*	
11:28	960.1	14.4	80	se.	9.8	396	960.1	14.4	.....	80	13.12	se.	9.8	388	.....	10/10 St.Cu., s.
						500	948.3	13.6	.....	80	12.46	se.	12.5	490	0	
						750	920.5	11.8	.....	82	11.35	sse.	19.1	735	0	
11:37	960.0	14.6	80	se.	19.3	816	913.2	11.3	0.74	82	10.98	sse.	20.8	800	0	
						1,000	893.2	10.0	.....	86	10.56	sse.	20.2	980	110	
11:47	959.9	15.0	76	se.	7.6	1,103	882.2	9.2	0.73	88	10.24	sse.	19.9	1,081	170	
						1,250	866.5	8.4	.....	94	10.36	s.	17.6	1,225	230	
11:55	959.8	15.4	76	se.	7.2	1,395	851.8	7.5	0.58	100	10.37	s.	15.4	1,367	290	Altitude of St.Cu. base about 1,400 m.
						1,500	840.5	8.0	.....	100	10.02	s.	14.4	1,470	330	
P. M.																
12:21	959.2	16.8	74	se.	8.5	1,739	816.8	6.0	0.44	100	9.35	ssw.	12.2	1,704	390	
						1,750	815.2	5.9	.....	100	9.29	ssw.	12.2	1,715	600	
						2,000	790.6	4.6	.....	99	8.40	sw.	13.0	1,960	1,000	
12:39	958.9	17.1	71	se.	10.3	2,228	769.0	3.3	0.55	98	7.59	sw.	11.9	2,183	1,330	
						2,250	765.7	3.6	.....	95	7.51	sw.	12.1	2,205	1,350	
						2,500	743.6	7.3	.....	57	5.83	sw.	14.9	2,450	1,620	
12:48	958.7	17.2	71	se.	8.9	2,648	730.6	9.4	−1.45	35	4.13	sw.	16.6	2,595	1,760	
						2,750	721.4	8.6	.....	33	3.69	sw.	16.8	2,694	1,900	
						3,000	699.6	6.6	.....	28	2.73	wsw.	17.4	2,939	2,090	
						3,250	674.8	4.7	.....	23	1.96	wsw.	18.0	3,184	2,230	
						3,500	658.0	2.7	.....	18	1.34	w.	18.6	3,429	2,370	2/10 A.Cu., sw.; 8/10 St.Cu., s.
1:30	957.7	18.2	68	se.	8.0	3,559	653.1	2.2	0.79	17	1.22	w.	18.7	3,486	2,400	Altitude of St.Cu. base about 1,300 m.
						3,750	638.2	0.0	.....	10	0.61	w.	20.1	3,673	.....	
2:08	956.8	18.0	71	se.	10.7	3,800	634.2	−0.6	1.06	8	0.46	w.	20.5	3,722	.....	
						3,750	638.2	−0.1	.....	8	0.48	w.	20.3	3,673	.....	
						3,500	658.0	2.3	.....	10	0.72	w.	19.5	3,429	1,900	10/10 St.Cu., s.
						3,250	678.4	4.7	.....	13	1.11	wsw.	18.7	3,184	1,830	Altitude of St.Cu. base about 1,800 m.
2:37	956.0	18.6	69	ese.	8.9	3,159	686.6	5.6	0.75	14	1.27	wsw.	18.4	3,095	1,780	
						3,000	699.6	6.8	.....	16	1.58	wsw.	17.8	2,939	1,700	
						2,750	721.4	8.7	.....	19	2.14	wsw.	16.9	2,694	1,560	
						2,500	743.6	10.6	.....	22	2.81	wsw.	16.0	2,450	1,430	
2:52	955.5	19.1	68	ese.	11.2	2,349	757.2	11.7	−5.19	24	3.30	wsw.	15.5	2,302	1,350	
						2,250	765.4	6.6	.....	74	7.22	sw.	17.6	2,205	1,220	
3:03	955.3	19.6	66	ese.	11.6	2,241	767.3	6.1	0.71	78	7.35	sw.	17.8	2,196	1,210	6/10 Ci.St., w.; 1/10 A.Cu., sw.; 3/10 St.Cu., s.
3:11	955.2	19.1	68	ese.	11.6	2,058	784.2	7.4	0.84	100	10.30	sw.	18.7	2,017	980	Altitude of A.Cu. base about 2,250 m.
						2,000	789.9	7.9	.....	99	10.54	ssw.	18.6	1,960	930	
						1,750	814.0	10.0	.....	96	11.79	s.	18.2	1,715	700	22°-halo, 2:52 to 3:10 p. m.
						1,500	838.5	12.1	.....	92	12.99	s.	17.9	1,470	340	
3:29	955.2	19.2	70	se.	8.9	1,344	855.4	13.5	−2.97	89	13.77	s.	17.6	1,308	60	
3:35	955.1	19.0	71	ese.	11.2	1,297	859.0	12.4	0.66	94	13.54	sse.	15.7	1,271	0	3/10 Ci.St., w.; 3/10 A.Cu., sw.; 4/10 St.Cu., w.
						1,250	864.0	12.7	.....	93	13.66	sse.	15.5	1,225	0	
						1,000	889.7	14.4	.....	87	14.27	se.	14.7	980	0	
3:46	955.1	18.2	70	ese.	10.7	813	909.6	15.6	0.62	82	14.53	se.	14.0	797	0	
						750	916.1	16.0	.....	80	14.54	se.	13.1	735	0	
						500	943.1	17.6	.....	74	14.90	ese.	9.5	490	0	
3:51	955.0	18.2	71	ese.	8.0	396	955.0	18.2	.....	71	14.84	ese.	8.0	388	.....	1/10 Ci.St., w.; 3/10 A.Cu., sw.; 6/10 St.Cu., s.

April 19, 1916 (No. 1).

A. M.																
7:23	948.9	14.6	88	wnw.	3.1	396	948.9	14.6	.....	88	14.63	wnw.	3.1	388	.....	3/10 Ci.St., wsw.; 4/10 St.Cu., w.
						500	936.3	14.5	.....	80	13.21	wnw.	4.2	490	0	
8:43	948.9	15.3	82	wnw.	4.9	734	911.8	14.2	0.12	61	9.88	w.	6.6	720	0	4/10 St.Cu., w.
						750	910.4	13.9	.....	63	10.00	w.	6.8	735	0	
9:09	949.0	15.6	81	wnw.	5.8	871	897.1	12.0	1.61	76	10.06	w.	8.2	854	0	
						1,000	883.8	11.4	.....	76	10.24	w.	.....	980	0	
						1,250	857.5	10.2	.....	76	9.46	wsw.	.....	1,225	0	6/10 St.Cu., sw.
						1,500	832.5	9.0	.....	76	8.72	wsw.	.....	1,470	0	Few Cu., sw.
9:46	949.2	16.2	79	w.	4.0	1,512	831.1	8.9	0.62	76	8.66	wsw.	.....	1,482	0	
						1,500	832.5	9.0	.....	76	8.72	wsw.	.....	1,470	0	
						1,250	857.5	10.9	.....	77	10.04	wsw.	.....	1,225	0	
9:52	949.2	16.2	78	w.	3.1	1,235	859.4	11.0	0.66	77	10.11	wsw.	8.9	1,211	0	
						1,000	883.8	12.5	.....	77	11.16	wsw.	7.2	980	0	
						750	910.4	14.2	.....	78	12.55	wsw.	5.4	735	0	
						500	936.3	15.8	.....	78	14.00	wsw.	3.5	490	0	
10:19	949.3	16.5	78	wsw.	2.7	396	949.3	16.5	.....	78	14.64	wsw.	2.7	388	.....	1/10 Ci., sw.; 7/10 St.Cu., sw.

April 19, 1916 (No. 2).

P. M.																
2:10	948.1	20.8	60	nw.	5.8	396	948.1	20.8	.....	60	14.74	nw.	5.8	388	.....	3/10 St. Cu., wsw.; 7/10 Cu., wsw.
						500	936.7	19.7	.....	62	14.23	nw.	5.6	490	0	
						750	909.1	17.0	.....	67	12.98	nw.	5.1	735	0	
2:45	947.8	20.3	59	nw.	3.6	825	901.6	16.2	1.07	68	12.53	nw.	5.0	809	0	Thunder heard.
4:19	947.1	17.4	77	n.	6.7	934	888.9	12.6	2.10	84	12.26	nnw.	7.8	916	(*)	5/10 Ci.St., sw.; 4/10 Cu., w.; 1/10 Fr.Cu., nnw.
						750	908.9	14.2	.....	81	13.11	nnw.	6.8	735	.....	
						500	935.8	16.5	.....	78	14.64	n.	5.5	490	.....	
4:37	947.3	17.4	76	n.	4.9	396	947.3	17.4	.....	76	15.10	n.	4.9	388	.....	10/10 St.Cu., wsw.

April 20, 1916.

A. M.																
7:14	955.1	7.8	86	wnw.	5.8	396	955.1	7.8	.....	86	9.10	wnw.	5.8	388	.....	10/10 St.Cu., nnw.
						500	942.8	6.5	.....	89	8.62	nw.	8.9	490	0	
7:28	955.1	7.6	86	nw.	8.0	742	915.5	3.4	1.27	95	7.41	nnw.	16.2	728	0	
						750	914.4	3.4	.....	95	7.41	nnw.	16.2	735	10	
						1,000	886.8	1.8	.....	94	6.54	nw.	16.5	980	330	Altitude of St.Cu. base about 900 m.
7:38	955.2	7.5	88	nw.	6.7	1,142	871.3	1.0	0.60	94	6.18	nw.	16.7	1,120	500	
						1,250	859.9	0.5	.....	92	5.82	nw.	18.6	1,225	640	
						1,500	833.7	−0.8	.....	87	4.97	nw.	22.9	1,470	1,140	10/10 St.Cu., nw.
7:50	955.2	7.3	87	nw.	6.3	1,618	821.2	−1.4	0.50	85	4.63	nw.	24.9	1,586	1,470	
																No record of descent.

* Over 10,000 volts.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 21, 1916 (No. 1).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
7:32	963.5	4.2	72	nw.	13.4	396	963.5	4.2	.....	72	5.94	nw.	13.4	388	.....	5/10 St.Cu., nw.
						500	951.2	3.0	.....	78	5.91	nw.	15.5	490	0	
7:39	963.6	4.1	74	nw.	13.4	743	923.0	0.1	1.18	92	5.66	nnw.	20.3	729	0	
						750	922.8	0.0	.....	92	5.62	nnw.	20.3	735	0	
						1,000	894.1	−2.1	.....	98	5.03	nnw.	21.6	980	0	Altitude of St.Cu. base about 1,000 m.
7:59	963.8	4.4	74	nnw.	14.3	1,078	885.1	−2.8	0.87	100	4.84	nnw.	22.0	1,057	1,050	
8:05	963.8	4.5	73	nnw.	13.0	1,242	867.3	−3.2	0.62	100	4.68	nnw.	28.5	1,218	1,050	
8:43	964.0	5.7	70	nnw.	12.1	1,054	888.6	−1.3	0.85	98	5.37	nnw.	17.8	1,033	1,055	6/10 St.Cu., nnw.
						1,000	894.5	−0.8	.....	96	5.48	nnw.	17.8	980	510	
8:55	964.1	5.4	71	nnw.	11.6	749	923.0	1.3	1.27	87	5.84	nnw.	18.0	734	0	
						500	952.1	4.5	.....	74	6.23	nnw.	12.6	490	0	
9:01	964.1	5.8	68	nnw.	10.3	396	964.1	5.8	.....	68	6.27	nnw.	10.3	388	.....	3/10 St.Cu., nnw.

April 21, 1916 (No. 2).

P. M.																
1:06	964.8	12.5	48	nnw.	8.0	396	964.8	12.5	.....	48	6.96	nnw.	8.0	388	.....	2/10 St.Cu., nw.
						500	952.6	10.8	.....	50	6.48	nnw.	11.5	490	0	
						750	924.1	6.9	.....	54	5.37	nw.	20.0	735	0	
1:14	964.7	12.1	43	nnw.	9.4	760	923.2	6.7	1.59	54	5.30	nw.	20.3	745	0	
						1,000	896.2	4.3	.....	62	5.15	nw.	20.5	980	300	
						1,250	869.5	1.9	.....	70	4.91	nw.	20.7	1,225	570	
1:30	964.6	12.6	44	nnw.	10.7	1,453	847.8	−0.1	0.98	76	4.61	nw.	20.9	1,424	755	3/10 St.Cu., nw.
						1,500	842.8	−0.5	.....	78	4.57	nw.	21.3	1,470	820	
						1,750	816.8	−2.6	.....	87	4.28	nw.	23.4	1,715	1,150	
						2,000	791.2	−4.7	.....	96	3.96	nw.	25.5	1,960	1,470	
1:47	964.6	12.6	45	nnw.	12.1	2,125	779.1	−5.7	0.83	100	3.78	nw.	26.6	2,082	1,620	Altitude of St.Cu. base about 2,100 m.
						2,250	767.0	−5.9	.....	98	3.64	nw.	30.3	2,205	1,790	
1:57	964.5	12.8	44	nnw.	10.7	2,310	760.7	−6.0	0.16	97	3.57	nw.	32.1	2,264	1,870	4/10 St.Cu., nw.
2:03	964.5	13.0	44	nnw.	13.4	2,486	744.1	−3.7	−1.92	70	3.14	nw.	33.0	2,436	2,100	
2:17	964.4	13.2	45	nnw.	9.4	2,368	755.6	−6.7	0.22	88	3.05	nw.	28.5	2,320	1,810	
						2,250	767.0	−6.4	.....	98	3.49	nw.	26.1	2,205	1,530	
2:28	964.3	13.3	45	nw.	13.4	2,233	769.0	−6.4	0.83	100	3.56	nw.	25.7	2,188	1,480	Altitude of St.Cu. base about 2,200 m.
						2,000	792.0	−4.5	.....	100	4.19	nw.	22.8	1,960	930	
2:47	964.2	12.7	48	nnw.	11.2	1,753	816.6	−2.4	1.09	100	5.00	nw.	19.7	1,718	400	
						1,500	843.3	0.3	.....	89	5.55	nw.	19.5	1,470	0	
						1,250	869.5	3.1	.....	79	6.03	nnw.	19.2	1,225	0	
						1,000	896.2	5.8	.....	68	6.27	nnw.	19.0	980	0	
3:18	964.0	13.2	45	nnw.	10.3	772	921.4	8.3	1.46	58	6.35	nnw.	18.8	757	0	
						750	923.6	8.6	.....	57	6.37	nnw.	18.2	735	0	
						500	951.4	12.3	.....	47	6.73	nnw.	11.0	490	0	
3:22	963.9	13.8	43	nnw.	8.0	396	963.9	13.8	.....	43	6.79	nnw.	8.0	388	.....	8/10 St.Cu., nw.

April 22, 1916 (No. 1).

A. M.																
7:14	964.1	6.0	81	ene.	4.0	396	964.1	6.0	.....	81	7.57	ene.	4.0	388	.....	4/10 Cl.St., nw.; 2/10 St.Cu., nw.
						500	952.0	6.2	.....	70	6.64	ene.	4.5	490	0	
8:16	964.4	8.6	63	ene.	5.8	712	928.1	6.7	0.22	49	4.81	ne.	5.5	698	0	
						750	923.9	6.7	.....	50	4.90	ne.	5.5	735	0	
8:31	964.7	9.4	58	ene.	3.6	979	898.6	6.7	−0.16	51	5.00	nne.	5.6	960	0	
						750	924.1	6.0	.....	52	4.86	ne.	6.6	735	0	
8:36	964.8	9.4	54	ene.	4.5	732	926.2	5.9	1.04	52	4.83	ne.	6.7	718	0	
						500	952.7	8.3	.....	53	5.80	ene.	5.2	490	0	
8:41	964.9	9.4	54	ene.	4.5	396	964.9	9.4	.....	54	6.37	ene.	4.5	388	.....	2/10 Cl.St. nw.; 1/10 A.Cu., nw.

April 22, 1916 (No. 2).

A. M.																
9:16	965.3	10.0	52	ene.	4.5	396	965.3	10.0	.....	52	6.39	ene.	4.5	388	.....	1/10 Cl.St., nw.
						500	953.5	8.8	.....	51	5.78	ene.	5.7	490	0	
						750	924.9	6.0	.....	50	4.68	ene.	8.5	735	0	
9:26	965.5	9.8	53	ene.	5.4	780	921.6	5.7	1.12	50	4.58	ene.	8.8	765	0	
						1,000	897.2	5.5	.....	37	3.34	ne.	8.1	980	0	
						1,250	870.7	5.2	.....	23	2.04	nne.	7.3	1,225	0	
11:40	965.8	13.0	45	ne.	4.0	1,298	865.6	5.2	0.10	20	1.77	n.	7.2	1,272	0	
11:43	965.8	13.3	43	ne.	4.0	1,433	851.5	7.1	−1.41	20	2.02	n.	7.2	1,405	0	
						1,500	844.9	7.0	.....	21	2.10	n.	7.5	1,470	0	
						1,750	819.4	6.5	.....	27	2.61	n.	8.5	1,715	0	
11:50	965.8	14.0	42	ne.	4.5	1,795	815.0	6.4	0.31	28	2.69	n.	8.7	1,759	0	
						1,750	819.4	6.6	.....	28	2.73	nne.	8.9	1,715	0	
11:53	965.8	14.1	41	nne.	4.5	1,608	834.0	7.2	−0.59	28	2.84	ne.	9.4	1,576	0	
						1,500	845.1	6.6	.....	27	2.63	ne.	8.9	1,470	0	
						1,250	871.6	5.1	.....	24	2.12	ne.	7.9	1,225	0	
P. M.																
12:05	965.8	14.1	41	nne.	4.9	1,204	876.3	4.8	1.20	24	2.06	ne.	7.7	1,180	0	Few Cl.St., nw.
						1,000	898.2	7.2	.....	29	2.95	ne.	6.6	980	0	
12:57	965.6	14.4	39	ne.	4.0	754	925.2	10.2	1.23	36	4.48	ne.	5.2	739	0	
						500	953.5	13.3	.....	40	6.11	ne.	4.3	490	0	
1:05	965.6	14.6	41	ne.	4.0	396	965.6	14.6	.....	41	6.81	ne.	4.0	388	.....	1/10 Cl.St., nw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 24, 1916 (No. 1).

Surface.						At different heights above sea.											Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.			
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.		
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*		
6:21	974.7	4.1	96	nw.	4.5	396	974.7	4.1	.....	96	7.86	nw.	4.5	388	.....		Cloudless.
6:25	974.8	4.2	96	nw.	4.0	484	964.3	4.9	−0.91	87	7.53	nnw.	13.0	475	0		
						500	962.3	4.8	.....	87	7.48	nnw.	13.1	490	0		
6:29	974.8	4.4	94	nw.	4.0	731	935.6	4.0	0.36	85	6.91	nnw.	14.8	717	0		
						750	933.0	3.9	.....	85	6.87	nnw.	14.9	735	0		
						1,000	904.5	2.4	.....	82	5.95	nnw.	16.0	980	0		
						1,250	877.6	1.0	.....	79	5.19	nnw.	17.1	1,225	240		
6:53	975.0	4.8	93	nw.	4.5	1,485	852.4	−0.4	0.58	77	4.55	nnw.	18.2	1,456	755		Few St.Cu., nnw.
						1,500	850.5	−0.5	.....	77	4.51	nnw.	18.2	1,470	770		
						1,750	824.1	−2.1	.....	70	3.59	nnw.	18.5	1,715	1,120		
						2,000	798.5	−3.7	.....	64	2.87	nnw.	18.8	1,960	1,270		
7:10	975.0	5.0	93	nw.	4.0	2,038	795.1	−3.9	0.63	63	2.78	nnw.	18.8	1,997	1,300		
						2,250	773.8	−4.9	.....	58	2.35	nnw.	19.4	2,205	1,530		
						2,500	749.4	−6.1	.....	52	1.90	nnw.	20.1	2,450	1,790		
						2,750	726.3	−7.3	.....	46	1.51	nnw.	20.8	2,694	2,050		
						3,000	703.8	−8.5	.....	40	1.18	nnw.	21.5	2,939	2,250		
						3,250	681.7	−9.7	.....	34	0.91	nnw.	22.2	3,184	2,440		
8:02	975.0	7.4	83	nw.	4.0	3,335	674.5	−10.1	0.48	32	0.82	nnw.	22.4	3,267	3,335		
						3,500	660.0	−11.0	.....	29	0.69	nnw.	23.9	3,429	2,530		
						3,750	639.1	−12.3	.....	26	0.55	nnw.	26.3	3,673	2,580		
9:02	975.3	9.4	74	nw.	4.9	3,858	630.7	−12.9	0.56	24	0.48	nnw.	27.3	3,779	.....		3/10 St. Cu., nnw.
						3,750	639.1	−12.3	.....	24	0.51	nnw.	26.1	3,673	.....		
						3,500	660.3	−10.8	.....	24	0.58	nnw	23.3	3,429	.....		
						3,250	682.5	−9.3	.....	25	0.69	nnw.	20.5	3,184	.....		
9:33	975.5	9.9	73	nw.	4.0	3,032	701.8	−8.0	0.56	25	0.78	nnw.	18.1	2,971	1,450		
						3,000	704.9	−7.8	.....	26	0.82	nnw.	17.9	2,939	1,420		
						2,750	727.6	−6.4	.....	33	1.17	nnw.	16.6	2,694	1,180		
						2,500	751.0	−5.0	.....	40	1.60	n.	15.2	2,450	930		
						2,250	775.2	−3.6	.....	47	2.12	n.	13.9	2,205	690		
9:50	975.6	10.2	72	nnw.	4.5	2,136	786.7	−3.0	0.61	50	2.38	n.	13.3	2,093	595		
						2,000	800.0	−2.2	.....	55	2.80	n.	12.4	1,960	480		
						1,750	825.3	−0.7	.....	65	3.74	n.	10.8	1,715	300		
						1,500	851.5	0.9	.....	74	4.82	n.	9.2	1,470	120		
						1,250	878.3	2.4	.....	84	6.10	n.	7.6	1,225	0		
10:15	975.6	11.0	70	n.	4.5	1,217	882.9	2.6	0.81	85	6.26	n.	7.4	1,193	0		
						1,000	905.6	4.3	.....	83	6.90	nnw.	7.9	980	0		
10:28	975.5	10.5	68	nnw.	4.0	820	926.7	5.8	1.44	81	7.47	nw.	8.4	804	0		
						750	934.1	6.8	.....	78	7.71	nw.	7.8	735	0		
						500	963.0	10.4	.....	69	8.70	nnw.	5.5	490	0		
10:42	975.4	11.9	65	nnw.	4.5	396	975.4	11.9	.....	65	9.05	nnw.	4.5	388	.....		4/10 St.Cu., nnw.

April 24, 1916 (No. 2).

P. M.																	
12:49	974.5	13.9	46	nnw.	4.0	396	974.5	13.9	.....	46	7.30	nnw.	4.0	388	.....		5/10 Cu., nnw.
						500	962.1	12.7	.....	46	6.76	nnw.	4.7	490	0		
						750	933.7	9.8	.....	47	5.70	nw.	6.5	735	0		
1:12	974.4	14.0	45	nw.	4.5	887	918.6	8.2	1.16	48	5.22	nw.	7.5	870	0		
						1,000	906.0	7.3	.....	40	5.01	nw.	7.8	980	0		
						1,250	878.9	5.2	.....	50	4.42	nnw.	8.4	1,225	0		
						1,500	852.1	3.1	.....	52	3.97	nnw.	9.0	1,470	160		
2:00	974.2	15.1	42	nnw.	4.9	1,518	850.7	3.0	0.82	52	3.94	nnw.	9.0	1,488	150		
						1,750	826.0	0.9	.....	56	3.65	nnw.	8.4	1,715	350		
						2,000	800.5	−1.4	.....	60	3.26	nnw.	7.8	1,960	540		
						2,250	776.0	−3.6	.....	65	2.94	nnw.	7.2	2,205	730		Strong ascending and descending currents.
2:58	973.8	16.0	35	nw.	4.9	2,324	768.8	−4.3	0.91	66	2.81	nnw.	7.0	2,277	790		
						2,500	751.9	−6.1	.....	72	2.63	nnw.	9.5	2,450	670		
3:40	973.7	16.1	28	nnw.	8.0	2,673	735.2	−7.9	1.03	78	2.43	nnw.	12.0	2,619	.....		
						2,750	728.6	−8.2	.....	75	2.28	nnw.	14.7	2,694	.....		
4:28	973.4	16.2	29	nnw.	6.7	2,836	720.5	−8.6	0.90	71	2.09	nnw.	17.8	2.779	.....		4/10 Cu., nnw.
						2,750	728.6	−7.4	.....	71	2.31	nnw.	15.6	2,694	.....		
4:40	973.3	16.3	29	nw.	6.7	2,645	738.6	−6.0	0.84	70	2.58	nnw.	12.9	2,502	.....		
						2,500	751.9	−4.8	.....	67	2.73	nnw.	12.7	2,450	0		
						2,250	776.0	−2.7	.....	61	2.98	nnw.	12.4	2,205	0		
						2,000	800.5	−0.6	.....	55	3.20	nnw.	12.1	1,960	0		
4:50	973.3	16.4	29	nw.	4.5	1,981	802.9	−0.4	1.16	55	3.25	nnw.	12.1	1,942	0		3/10 Cu., nnw.
						1,750	826.0	2.3	.....	53	3.82	nnw.	11.5	1,715	0		
						1,500	851.9	5.2	.....	51	4.51	nnw.	10.9	1,470	0		
5:10	973.1	16.2	29	nnw.	3.6	1,410	861.6	6.2	0.87	50	4.74	nnw.	10.7	1,382	0		
						1,250	878.1	7.6	.....	47	4.91	nnw.	9.8	1,225	0		
						1,000	905.0	9.8	.....	43	5.21	nnw.	8.4	980	0		
5:24	973.0	16.1	27	nnw.	5.8	857	921.1	11.0	1.08	40	5.25	nnw.	7.6	840	0		
						750	932.7	12.1	.....	37	5.22	nnw.	6.7	735	0		
						500	961.0	14.9	.....	30	5.08	nnw.	4.5	490	0		
5:38	973.0	16.0	27	nnw.	3.6	396	973.0	16.0	.....	27	4.91	nnw.	3.6	388	.....		1/10 Cu., nnw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 25, 1916 (No. 1).

Surface.						At different heights above sea.											Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\,m.}$	Humidity.		Wind.		Potential.			
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.		
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*		
8:06	973.6	9.3	73	nw.	4.0	396	973.6	9.3	.....	73	8.56	nw.	4.0	388	.....		10/10 A.St., wnw.
						500	961.2	8.6	.....	69	7.71	nw.	6.1	490	0		
						750	932.8	6.9	.....	60	5.97	nnw.	11.3	735	0		
8:21	973.5	9.3	69	nnw.	4.0	800	927.0	6.6	0.67	58	5.66	nnw.	12.3	784	0		
						1,000	904.2	4.8	.....	57	4.90	nnw.	10.8	980	0		
8:35	973.4	9.9	65	nnw.	4.5	1,161	886.8	3.3	0.91	57	4.41	nnw.	9.6	1,138	0		3/10 Ci.St., wnw.; 4/10 A.St., wnw.
						1,250	876.8	2.6	.....	57	4.20	nnw.	10.6	1,225	180		
						1,500	850.0	0.0	.....	58	3.54	nnw.	14.1	1,470	680		
8:49	973.4	10.8	58	nnw.	4.9	1,557	844.3	−0.6	0.98	58	3.37	nnw.	14.9	1,526	780		
						1,750	823.5	−2.2	.....	62	3.16	nnw.	16.5	1,715	1,050		
						2,000	798.0	−4.3	.....	67	2.85	nnw.	18.6	1,960	1,400		
						2,250	773.1	−6.4	.....	72	2.56	nnw.	20.7	2,205	1,720		
						2,500	749.0	−8.4	.....	77	2.30	nnw.	22.8	2,450	1,960		
						2,750	725.3	−10.5	.....	82	2.03	nnw.	24.9	2,694	2,200		
9:16	973.2	11.6	48	nnw.	5.4	2,756	724.5	−10.5	0.78	82	2.03	nnw.	25.0	2,700	2,200		2/10 Ci.St., wnw.; 4/10 Cu., nnw.
						2,750	725.3	−10.5	.....	82	2.03	nnw.	24.9	2,694	2,200		
						2,500	749.0	−8.6	.....	80	2.35	nnw.	22.6	2,450	1,800		
						2,250	773.1	−6.8	.....	78	2.68	nnw.	20.3	2,205	1,380		6/10 Cu., nnw.
9:56	972.9	11.4	43	nnw.	8.0	2,178	780.1	−6.3	0.92	78	2.80	nnw.	19.6	2,134	1,250		Altitude of Cu. base about 2,050 meters.
						2,000	798.0	−4.7	.....	77	3.17	nnw.	18.0	1,960	960		
						1,750	823.5	−2.4	.....	77	3.85	nnw.	15.7	1,715	540		
10:19	972.9	11.7	40	nnw.	7.6	1,635	835.8	−1.3	0.95	76	4.16	nnw.	14.6	1,602	330		
						1,500	850.0	0.0	.....	72	4.40	nnw.	14.7	1,470	240		
						1,250	876.8	2.4	.....	66	4.79	nnw.	15.0	1,225	50		
						1,000	904.0	4.7	.....	59	5.04	nnw.	15.2	980	0		
10:53	972.9	11.0	45	nnw.	8.9	773	929.6	6.9	1.14	53	5.27	nnw.	15.4	758	0		
						750	932.1	7.2	.....	52	5.28	nnw.	15.0	735	0		
						500	960.5	10.0	.....	46	5.65	nnw.	10.7	490	0		
11:00	972.9	11.2	43	nnw.	8.9	396	972.9	11.2	.....	43	5.72	nnw.	8.9	388	.....		6/10 Cu., nnw.

April 25, 1916 (No. 2).

A. M.																	
11:51	972.9	11.0	45	nnw.	9.8	396	972.9	11.0	.....	45	5.91	nnw.	9.8	388	.....		6/10 Cu., nnw.
						500	960.0	.....	.....	46	.....	nnw.	11.7	490	0		
11:58	972.9	11.8	44	nnw.	8.5	710	935.4	.....	.....	48	.....	nnw.	15.6	696	0		
						750	930.8	.....	.....	49	.....	nnw.	15.6	735	0		
						1,000	902.1	.....	.....	57	.....	nnw.	15.8	980	0		
						1,250	874.1	.....	.....	65	.....	nnw.	15.9	1,225	300		
						1,500	847.1	.....	.....	73	.....	nnw.	16.1	1,470	630		
P. M.																	
12:19	972.8	11.2	44	n.	7.2	1,556	841.4	.....	.....	75	.....	nnw.	16.1	1,525	670		
						1,750	820.8	.....	.....	82	.....	nnw.	16.6	1,715	810		
12:41	972.7	11.0	43	n.	8.9	1,880	808.0	.....	.....	86	.....	nnw.	16.9	1,843	900		7/10 Cu., nnw.
						2,000	795.6	.....	.....	81	.....	nnw.	16.8	1,960	1,000		
						2,250	771.3	.....	.....	71	.....	nnw.	16.6	2,205	1,200		Altitude of Cu. base about 2,100 meters.
						2,500	747.7	.....	.....	61	.....	nw.	16.5	2,450	1,400		
2:04	972.6	10.8	42	nnw.	11.6	2,704	728.8	.....	.....	53	.....	nw.	16.4	2,650	.....		8/10 Cu., nw.
						2,500	747.7	.....	.....	61	.....	nw.	15.8	2,450	.....		
						2,250	771.3	.....	.....	70	.....	nw.	15.0	2,205	1,240		
						2,000	795.6	.....	.....	80	.....	nw.	14.2	1,960	940		
2:22	972.6	11.0	46	nnw.	8.5	1,938	802.1	.....	.....	82	.....	nw.	14.0	1,899	860		
						1,750	820.8	.....	.....	79	.....	nw.	14.4	1,715	670		
						1,500	847.1	.....	.....	75	.....	nnw.	14.9	1,470	480		
2:51	972.6	10.3	44	nnw.	8.5	1,395	858.4	.....	.....	73	.....	nnw.	15.1	1,367	240		4/10 St.Cu., nw.; 5/10 Cu., nw.
						1,250	874.1	.....	.....	68	.....	nnw.	15.4	1,225	80		
						1,000	902.1	.....	.....	59	.....	nnw.	16.0	980	340		
3:45	972.6	11.0	43	nnw.	9.4	806	924.0	.....	.....	52	.....	nnw.	16.5	790	70		
						750	930.6	.....	.....	51	.....	nnw.	15.6	735	0		
						500	959.8	.....	.....	48	.....	nnw.	11.5	490	0		
3:54	972.6	10.4	47	nnw.	9.8	396	972.6	10.4	.....	47	5.93	nnw.	9.8	388	.....		7/10 Cu., nw.

April 26, 1916.

A. M.																	
8:23	976.8	6.3	80	n.	7.6	396	976.8	6.3	.....	80	7.64	n.	7.6	388	.....		10/10 St.Cu., nnw.
						500	964.2	5.1	.....	82	7.21	n.	9.9	490	0		Misting from 8:11 to 8:45 a. m.
						750	935.2	2.4	.....	88	6.39	n.	15.3	735	0		
8:32	976.8	6.0	84	n.	6.7	791	930.5	1.9	1.11	89	6.24	n.	16.2	776	0		Altitude of St.Cu. base about 800 m.
						1,000	906.8	0.6	.....	88	5.61	n.	19.0	980	1,020		
						1,250	878.7	−1.0	.....	86	4.83	n.	22.4	1,225	1,100		
8:46	976.9	6.2	82	n.	6.7	1,260	877.8	−1.1	0.64	86	4.79	n.	22.5	1,235	1,100		
8:50	976.9	6.2	80	n.	6.7	1,385	864.2	−0.2	−0.72	76	4.57	n.	20.4	1,358	1,330		
						1,500	851.6	−0.5	.....	76	4.45	n.	18.7	1,470	1,540		
						1,750	825.5	−1.3	.....	76	4.16	n.	15.2	1,715	1,980		
9:10	977.0	6.8	75	n.	7.6	1,761	824.6	−1.3	0.29	76	4.16	n.	15.0	1,726	2,000		10/10 St.Cu., nnw.
						2,000	800.3	−3.4	.....	80	3.68	n.	14.7	1,960	3,090		
9:25	977.0	7.1	74	n.	5.4	2,160	784.2	−4.8	0.88	82	3.35	n.	14.5	2,117	2,960		
						2,250	775.3	−3.7	.....	77	3.45	n.	13.5	2,205	2,830		
10:00	977.0	6.6	78	n.	7.2	2,263	773.9	−3.5	−1.26	76	3.47	n.	13.3	2,218	2,800		10/10 St.Cu., nnw.
						2,500	750.8	−5.6	.....	79	3.01	n.	13.5	2,450	3,180		
						2,750	727.1	−7.8	.....	83	2.61	n.	13.7	2,694	.....		
10:13	977.1	6.9	77	n.	8.0	2,847	718.5	−8.6	0.88	84	2.47	n.	13.8	2,789	.....		
						2,750	727.1	−7.7	.....	83	2.64	n.	13.7	2,694	.....		
						2,500	750.8	−5.6	.....	79	3.01	n.	13.5	2,450	2,260		
						2,250	775.3	−3.4	.....	75	3.45	n.	13.3	2,205	2,270		
10:32	977.2	7.0	75	n.	8.0	2,152	785.4	−2.5	−2.78	74	3.67	n.	13.2	2,109	2,280		Altitude of St.Cu. base about 950 m.
10:34	977.2	7.0	74	n.	7.6	2,116	789.0	−3.5	0.65	83	3.78	n.	13.2	2,074	2,280		10/10 St.Cu., n.
						2,000	800.3	−2.7	.....	81	3.95	n.	14.5	1,960	2,290		
						1,750	826.2	−1.1	.....	77	4.29	n.	17.4	1,715	1,890		
10:55	977.3	7.5	71	n.	5.4	1,547	847.5	0.2	−0.53	74	4.59	n.	19.7	1,516	1,320		
						1,500	852.5	−0.1	.....	75	4.54	n.	19.0	1,470	1,200		
10:57	977.3	7.6	70	n.	5.4	1,322	871.8	−1.0	0.71	81	4.55	n.	16.3	1,296	630		
						1,250	879.5	−0.5	.....	81	4.75	n.	16.0	1,225	510		Altitude of St.Cu. base about 1,050 m.
						1,000	906.8	1.3	.....	80	5.37	n.	14.9	980	150		
11:10	977.3	7.9	70	n.	5.8	775	933.0	2.9	1.50	80	6.02	n.	14.0	760	0		
						750	935.2	3.3	.....	79	6.11	n.	13.5	735	0		
						500	964.6	7.0	.....	72	7.21	n.	8.1	490	0		
11:18	977.3	8.6	69	n.	5.8	396	977.3	8.6	.....	69	7.71	n.	5.8	388	.....		10/10 St.Cu., n.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 27, 1916.

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
7:53	977.3	8.4	77	n.	2.7	396	977.3	8.4	.....	77	8.49	n.	2.7	388	.....	10/10 St.Cu., n.
						500	965.1	7.7	.....	78	8.20	n.	4.1	490	0	
9:00	977.7	9.5	72	nne.	2.7	727	939.1	6.2	0.01	80	7.58	nne.	7.0	713	0	
						500	965.3	8.8	.....	75	8.50	nne.	4.1	490	0	
9:20	977.7	10.0	72	nne.	2.7	396	977.7	10.0	.....	72	8.84	nne.	2.7	388	.....	10/10 St.Cu., n.

April 28, 1916, series (No. 1).

A. M.																
6:19	971.2	6.9	78	s.	4.9	396	971.2	6.9	.....	78	7.76	s.	4.9	388	.....	3/10 Cl., nw.
6:20	971.2	6.9	78	s.	5.8	483	961.1	9.8	−3.33	72	8.73	s.	10.2	474	0	
						500	959.0	9.7	.....	72	8.66	s.	10.4	490	0	
6:26	971.1	7.1	77	s.	5.4	747	930.9	8.8	0.38	69	7.82	ssw.	13.5	732	0	
						1,000	902.2	6.6	.....	69	6.73	ssw.	14.1	980	380	
						1,250	875.0	4.5	.....	69	5.81	sw.	14.7	1,225	790	
6:50	971.0	8.1	74	s.	6.7	1,482	850.9	2.5	0.86	69	5.04	sw.	15.3	1,453	1,250	
						1,500	848.2	2.6	.....	67	4.94	sw.	14.9	1,470	1,240	
7:10	970.8	8.6	73	s.	4.9	1,655	832.8	3.6	−0.64	52	4.11	sw.	11.3	1,622	1,200	3/10 Cl., nw.
						1,750	822.8	2.9	.....	51	3.84	sw.	10.9	1,715	1,470	
						2,000	797.8	1.1	.....	49	3.24	sw.	9.7	1,960	1,820	
7:49	970.7	10.2	67	ssw.	8.0	2,099	788.6	0.4	0.72	48	3.02	sw.	9.3	2,057	1,880	
						2,250	773.7	0.6	.....	43	2.74	sw.	9.1	2,205	1,980	
8:22	970.4	11.2	63	sw.	9.4	2,388	760.5	0.8	−0.14	39	2.52	sw.	9.0	2,340	2,500	2/10 Cl., nw.; 1/10 Cl.St., nw.
						2,500	750.0	0.6	.....	37	2.36	sw.	8.7	2,450	2,220	
						2,750	726.9	0.1	.....	32	1.97	sw.	8.0	2,694	.....	
9:07	969.9	13.0	58	sw.	10.7	2,926	710.8	−0.3	0.28	29	1.73	sw.	7.5	2,867	.....	2/10 Cl., nw.
						2,750	726.9	0.3	.....	29	1.81	sw.	8.3	2,694	.....	
						2,500	749.2	1.2	.....	28	1.86	sw.	9.5	2,450	1,380	
9:30	969.6	13.4	56	sw.	11.2	2,368	761.7	1.7	−0.12	28	1.93	sw.	10.1	2,320	1,350	
						2,250	772.5	1.6	.....	28	1.92	sw.	11.4	2,205	1,310	
9:35	969.6	13.5	54	sw.	11.2	2,197	777.9	1.5	0.54	28	1.91	sw.	12.0	2,153	1,300	1/10 Cl., nw.; few Cu., sw.
						2,000	796.5	2.6	.....	29	2.14	sw.	12.5	1,960	1,220	
9:52	969.4	14.0	50	sw.	13.0	1,881	808.7	3.2	−1.04	29	2.23	sw.	12.8	1,844	1,080	
						1,750	822.1	1.8	.....	34	2.37	sw.	16.2	1,715	890	
9:55	969.4	14.4	51	sw.	17.0	1,717	825.5	1.5	0.75	35	2.38	sw.	17.1	1,683	840	
						1,500	848.0	3.1	.....	55	4.04	sw.	17.8	1,470	480	
10:10	969.1	13.8	51	sw.	14.8	1,253	874.1	5.0	0.93	73	6.37	sw.	18.5	1,228	0	
						1,000	901.2	7.4	.....	68	7.00	sw.	18.2	980	0	
10:19	969.0	14.4	49	ssw.	15.6	802	923.1	9.2	1.33	64	7.45	sw.	18.0	786	0	
						750	929.0	9.9	.....	62	7.56	sw.	17.5	735	0	
						500	956.8	13.2	.....	52	7.89	ssw.	15.2	490	0	
10:26	968.8	14.6	48	ssw.	14.3	396	968.8	14.6	.....	48	7.98	ssw.	14.3	388	.....	1/10 Cl.St., nw.; few Cu., sw.

April 28, 1916, series (No. 2.)

A. M.																
11:08	968.1	15.3	47	sw.	14.8	396	968.1	15.3	.....	47	8.17	sw.	14.8	388	.....	1/10 Cl.St., nw.
						500	956.0	14.0	.....	47	7.51	sw.	16.0	490	0	
						750	927.4	10.7	.....	48	6.18	ssw.	18.9	735	0	
11:15	968.0	15.6	45	ssw.	14.3	797	922.9	10.1	1.30	48	5.93	ssw.	19.5	781	0	
						1,000	899.9	8.2	.....	53	3.76	ssw.	18.6	980	130	
						1,250	873.0	5.8	.....	60	5.53	ssw.	17.5	1,225	330	
11:32	967.7	15.8	47	ssw.	17.4	1,463	850.9	3.8	0.95	66	5.29	ssw.	16.5	1,434	680	
						1,500	846.9	4.0	.....	62	5.04	ssw.	17.1	1,470	740	
11:39	967.5	16.2	44	ssw.	14.3	1,672	829.1	4.7	−0.43	41	3.50	ssw.	19.9	1,639	1,000	
						1,750	821.2	4.3	.....	40	3.32	ssw.	19.5	1,715	1,070	
						2,000	796.2	2.9	.....	35	2.64	ssw.	18.2	1,960	1,270	
						2,250	772.2	1.5	.....	31	2.11	ssw.	17.0	2,205	1,440	1/10 Cl.St., nw.
						2,500	728.3	0.1	.....	26	1.60	ssw.	15.7	2,450	1,400	
P. M.																
12:04	967.1	16.8	41	ssw.	15.2	2,546	744.2	−0.2	0.56	25	1.50	ssw.	15.5	2,495	1,400	22°-halo. 12:21 to 12:30 p. m.
						2,750	725.4	0.8	.....	22	1.42	ssw.	14.6	2,694	1,770	
						3,000	702.9	2.0	.....	17	1.20	ssw.	13.6	2,939	2,000	3/10 Cl., nw.; 3/10 Cl.St., nw.
1:00	965.8	17.9	38	sw.	13.9	3,015	700.9	2.1	−0.49	17	1.21	ssw.	13.5	2,954	2,000	
						3,250	681.2	1.1	.....	15	0.99	ssw.	11.7	3,184	.....	
1:10	965.6	18.0	38	sw.	13.4	3,281	678.7	1.0	0.40	15	0.99	ssw.	11.5	3,214	.....	
						3,250	681.2	1.1	.....	15	0.99	ssw.	11.7	3 184	.....	
						3,000	702.9	2.1	.....	14	1.00	ssw.	13.7	2,939	.....	
1:35	965.2	18.7	35	ssw.	13.9	2,895	712.3	2.5	−1.23	13	0.95	ssw.	14.5	2,836	1,300	
1:38	965.2	18.8	35	ssw.	15.6	2,781	722.4	1.1	0.28	13	0.86	ssw.	16.0	2,725	1,000	
						2,750	725.1	1.2	.....	13	0.87	ssw.	16.0	2,694	980	4/10 Cl.St., nw.
						2,500	747.8	1.9	.....	14	0.98	ssw.	16.3	2,450	810	
						2,250	771.1	2.6	.....	15	1.11	ssw.	16.6	2,205	580	
						2,000	795.1	3.3	.....	16	1.24	ssw.	16.9	1,960	340	
2:05	964.7	19.5	34	ssw.	11.2	1,863	808.9	3.7	0.96	17	1.35	ssw.	17.1	1,826	200	
						1,750	819.9	4.8	.....	21	1.81	ssw.	17.2	1,715	90	
						1,500	845.2	7.2	.....	30	3.05	ssw.	17.5	1,470	0	
						1,250	871.0	9.6	.....	40	4.78	ssw.	17.8	1,225	0	
2:25	964.4	19.3	36	ssw.	13.4	1,227	874.0	9.8	0.89	41	4.97	ssw.	17.8	1,203	0	
						1,000	897.2	11.8	.....	40	5.54	ssw.	18.4	980	0	22°-halo after 2:30 p. m.
2:35	964.2	19.0	35	ssw.	13.0	779	921.6	13.8	1.41	39	6.15	ssw.	19.0	764	0	
						750	924.3	14.2	.....	39	6.31	ssw.	18.6	735	0	
						500	952.2	17.7	.....	35	7.09	sw.	14.9	490	0	
2:44	964.1	19.2	34	sw.	13.4	396	964.1	19.2	.....	34	7.56	sw.	13.4	388	.....	2/10 Cl., nw.; 7/10 Cl.St., nw.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 28, 1916, series (No. 3.)

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
3:21	963.5	19.2	31	SSW.	14.3	396	963.5	19.2	.....	31	6.90	SSW.	14.3	388	.....	9/10 Ci., nw.
						500	951.5	18.0	.....	31	6.40	SSW.	16.1	490	0	
3:26	963.4	19.0	33	SSW.	14.8	731	926.1	15.2	1.19	32	5.53	SSW.	20.0	717	0	
						750	924.2	15.0	.....	32	5.46	SSW.	20.0	735	0	
						1,000	897.2	12.4	.....	36	5.18	SSW.	20.3	980	0	22°-halo until 3:51 p. m.
						1,250	870.4	9.9	.....	39	4.76	SSW.	20.7	1,225	100	
						1,500	844.1	7.3	.....	43	4.40	SSW.	21.0	1,470	310	
3:51	963.0	19.0	30	SSW.	16.1	1,530	841.2	7.1	1.01	43	4.34	SSW.	21.0	1,500	330	
						1,750	818.4	5.4	.....	48	4.31	SSW.	19.4	1,715	440	
4:00	962.8	19.4	30	SSW.	13.9	1,938	800.3	4.0	0.76	53	4.31	SSW.	18.0	1,899	540	
						2,000	793.6	3.7	.....	50	3.98	SSW.	18.6	1,960	570	
						2,250	769.5	2.4	.....	38	2.76	SSW.	20.9	2,205	750	
4:09	962.8	19.1	30	SSW.	12.5	2,279	767.1	2.2	0.53	37	2.65	SSW.	21.2	2,233	780	
4:18	962.7	18.7	32	SSW.	16.5	2,451	750.8	4.3	−1.22	26	2.16	SSW.	18.0	2,402	980	
						2,500	746.3	4.2	.....	25	2.06	SSW.	17.7	2,450	1,010	
						2,750	724.0	3.6	.....	20	1.58	SW.	16.0	2,694	1,130	
						3,000	702.0	3.0	.....	16	1.21	SW.	14.2	2,939	.....	
4:59	962.5	19.1	31	SSW.	14.3	3,020	700.2	3.0	0.34	16	1.21	SW.	14.1	2,959	.....	
						3,000	702.0	3.1	.....	16	1.22	SW.	14.5	2,939	.....	
						2,750	724.0	4.2	.....	14	1.16	SW.	19.0	2,694	.....	
						2,500	746.3	5.3	.....	13	1.16	SSW.	23.5	2,450	870	
5:35	962.1	19.1	31	SSW.	14.3	2,252	769.4	6.4	−0.90	12	1.15	SSW.	28.0	2,207	730	8/10 Ci., nw.
						2,000	793.6	4.1	.....	14	1.15	SSW.	22.7	1,960	550	
5:45	962.0	18.7	32	SSW.	16.5	1,931	800.3	3.5	1.02	14	1.10	SSW.	21.2	1,893	500	
						1,750	818.4	5.4	.....	21	1.88	SSW.	21.0	1,715	360	
5:56	961.8	18.2	31	SSW.	16.5	1,521	841.2	7.7	0.92	30	3.15	SSW.	20.8	1,491	170	
						1,500	843.5	7.9	.....	30	3.20	SSW.	20.9	1,470	160	
						1,250	869.0	10.2	.....	36	4.48	SSW.	21.9	1,225	50	
6:06	961.7	17.8	32	SSW.	14.8	1,151	879.2	11.1	0.94	38	5.02	SSW.	22.3	1,128	0	
						1,000	895.1	12.5	.....	37	5.36	SSW.	22.3	980	0	
						750	922.0	14.9	.....	36	6.10	SSW.	22.2	735	0	
6:18	961.6	17.8	32	SSW.	13.9	727	924.8	15.1	0.76	35	6.01	SSW.	22.2	713	0	
						500	949.5	16.8	.....	34	6.50	SSW.	16.5	490	0	
6:23	961.5	17.6	33	SSW.	13.9	396	961.5	17.6	.....	33	6.64	SSW.	13.9	388	.....	5/10 Ci., nw.; 2/10 Ci.St., nw.; 2/10 A.St., nw.

April 28, 1916, series (No. 4).

P. M.																
6:56	961.0	17.2	33	SSW.	12.1	396	961.0	17.2	.....	33	6.47	SSW.	12.1	388	.....	5/10 Ci., nw.; 2/10 Ci.St., nw.; 2/10 A.St., wnw.
						500	949.3	16.6	.....	33	6.23	SSW.	14.8	490	0	
						750	921.8	15.1	.....	34	5.83	SSW.	21.4	735	0	
7:05	961.0	17.2	33	SSW.	12.5	772	919.3	15.0	0.59	34	5.80	SSW.	22.0	757	0	
						1,000	894.9	12.6	.....	37	5.40	SSW.	22.6	980	0	
						1,250	868.5	9.9	.....	41	5.00	SSW.	23.3	1,225	240	
7:25	960.8	17.0	34	SSW.	11.2	1,445	848.2	7.8	1.07	44	4.66	SSW.	23.9	1,416	490	3/10 Ci., nw.; 3/10 Ci.St., nw.; 3/10 A.St., wnw.
						1,500	842.4	7.4	.....	44	4.53	SSW.	23.6	1,470	530	
						1,750	817.0	5.3	.....	47	4.19	SSW.	22.2	1,715	710	
7:37	960.7	16.7	35	SSW.	11.2	1,888	803.5	4.2	0.81	48	3.96	SSW.	21.5	1,850	810	
						2,000	792.1	6.4	.....	39	3.75	SSW.	18.2	1,960	900	
7:51	960.6	16.3	36	SSW.	10.7	2,091	783.4	8.2	−1.97	31	3.37	SSW.	15.0	2,049	960	
						2,250	768.4	7.3	.....	27	2.76	SSW.	13.7	2,205	1,060	
						2,500	745.3	5.8	.....	20	1.84	SW.	11.6	2,450	1,200	
8:22	960.7	15.8	38	SSW.	13.4	2,561	740.0	5.4	1.38	18	1.61	SW.	11.1	2,509	.....	
8:30	960.8	15.7	38	SSW.	13.0	2,510	744.5	6.5	−1.07	16	1.55	SW.	12.6	2,460	.....	
						2,500	745.3	6.4	.....	16	1.54	SW.	13.0	2,450	.....	
9:04	961.0	15.3	40	SSW.	11.6	2,257	767.9	3.8	0.66	11	0.88	SW.	22.5	2,212	920	
						2,250	768.4	3.8	.....	11	0.88	SW.	22.5	2,205	920	
						2,000	792.1	5.4	.....	16	1.44	SW.	21.6	1,960	760	
						1,750	816.5	7.1	.....	21	2.12	SSW.	20.7	1,715	610	
9:31	960.9	14.8	42	SSW.	9.4	1,679	824.0	7.6	0.49	22	2.30	SSW.	20.4	1,646	565	
						1,500	841.8	8.5	.....	33	3.66	SSW.	22.3	1,470	450	
9:50	960.8	14.1	43	SSW.	8.9	1,311	861.5	9.4	0.85	44	5.19	SSW.	24.4	1,285	330	
						1,250	867.6	9.9	.....	44	5.37	SSW.	25.2	1,225	290	
						1,000	894.0	12.0	.....	44	6.17	SSW.	28.4	980	90	
10:05	960.7	14.0	43	S.	8.0	885	906.5	13.0	0.51	44	6.59	SSW.	29.9	868	0	
						750	921.0	13.7	.....	44	6.90	SSW.	27.1	735	0	
10:18	960.6	14.3	42	S.	8.9	648	932.3	14.2	−0.08	44	7.12	SSW.	25.0	635	0	
						500	948.5	14.1	.....	43	6.92	S.	16.1	490	0	
10:22	960.5	14.0	43	S.	9.8	396	960.5	14.0	.....	43	6.87	S.	9.8	388	.....	4/10 Ci.St., nw.

April 28–29, 1916, series (No. 5).

P. M.																
10:57	960.1	12.8	48	S.	7.2	396	960.1	12.8	.....	48	7.09	S.	7.2	388	.....	4/10 Ci.St., nw.
						500	947.9	12.8	.....	48	7.09	S.	14.9	490	0	
11:04	960.1	12.6	49	SSW.	7.2	703	925.7	12.8	0.00	47	6.95	SSW.	30.0	689	0	
						750	920.0	12.6	.....	47	6.86	SSW.	32.3	735	0	
11:26	959.9	12.9	48	SSW.	8.5	901	903.8	12.0	0.28	47	6.59	SSW.	39.5	883	0	Increasing cloudiness.
						750	920.0	12.1	.....	48	6.78	SSW.	41.8	735	0	
A. M.																
12:11	959.8	13.6	47	S.	12.1	593	937.5	12.3	0.66	50	7.16	SSW.	44.2	581	0	
						500	947.9	12.9	.....	49	7.29	SSW.	29.9	490	0	
12:16	959.9	13.6	47	SSW.	13.9	396	959.9	13.6	.....	47	7.32	SSW.	13.9	388	.....	Sky overcast.

TABLE 2.—*Free-air data from kite flights at Drexel Aerological Station, April, 1916*—Continued.

April 29, 1916, series (No. 6).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt 100 m.	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	mb.	°C.	%		m. p. s.	m.	mb.	°C.		%	mb.		m. p. s.	10^6 ergs.	volts.	
12:49	960.4	13.5	48	ssw.	13.0	396	960.4	13.5	.....	48	7.43	ssw.	13.0	388	.....	Sky overcast.
						500	948.2	12.9	.....	49	7.29	ssw.	20.3	490	0	
						750	920.4	11.6	.....	50	6.83	sw.	37.9	735	0	
12:58	960.5	13.3	49	ssw.	11.6	768	918.7	11.5	0.47	50	6.78	sw.	39.2	753	0	
						750	920.4	11.6	.....	50	6.83	sw.	37.9	735	0	
						500	948.0	12.6	.....	51	7.44	ssw	19.3	490	0	
1:19	960.0	13.0	51	ssw.	11.6	396	960.0	13.0	.....	51	7.64	ssw.	11.6	388	.....	

April 29, 1916, series (No. 7).

A. M.																
1:35	959.6	13.4	49	ssw.	13.0	396	959.6	13.4	.....	49	7.53	ssw.	13.0	388	.....	Distant lightning.
						500	947.2	12.9	.....	50	7.44	ssw.	19.8	490	0	
						750	919.1	11.6	.....	52	7.10	ssw.	36.3	735	0	
1:58	959.0	13.3	48	ssw.	12.5	826	911.0	11.2	0.48	53	7.05	ssw.	41.3	810	0	4/10 St.Cu., sw.
						750	919.1	11.5	.....	52	7.06	ssw.	36.2	735	0	
						500	946.9	12.6	.....	50	7.30	ssw.	19.5	490	0	
2:40	958.9	13.1	49	ssw.	12.5	396	958.9	13.1	.....	49	7.39	ssw.	12.5	388	.....	7/10 St.Cu., sw.

April 29, 1916, series (No. 8).

A. M.																
7:26	960.1	12.3	59	ssw.	9.4	396	960.1	12.3	.....	59	8.44	ssw.	9.4	388	.....	10/10 A.St., w.
						500	948.2	11.6	.....	60	8.20	ssw.	12.5	490	0	
						750	920.1	9.9	.....	61	7.44	sw.	19.9	735	0	
7:36	960.2	12.2	60	ssw.	8.5	795	915.3	9.6	0.68	61	7.29	sw.	21.2	779	0	
						1,000	892.8	8.3	.....	64	7.01	sw.	23.0	980	0	
7:45	960.3	12.2	60	s.	7.6	1,168	875.1	7.3	0.62	66	6.75	sw.	24.5	1,145	0	
						1,250	866.3	6.8	.....	68	6.72	sw.	23.7	1,225	0	
						1,500	840.2	5.1	.....	75	6.59	sw.	21.1	1,470	0	
8:03	960.5	12.2	60	s.	7.2	1,545	836.0	4.8	0.66	76	6.54	sw.	20.6	1,514	0	10/10 A.St., w.
						1,750	815.0	3.0	.....	75	5.68	wsw.	19.9	1,715	0	
						2,000	790.2	0.8	.....	74	4.79	w.	19.0	1,960	.....	
8:43	960.7	12.4	60	ssw.	5.8	2,009	789.3	0.7	0.73	74	4.76	w.	19.0	1,909	.....	Altitude of A.St. base about 2,000m.
						2,000	790.2	0.7	.....	74	4.76	w.	19.0	1,960	.....	
						1,750	815.0	2.2	.....	71	5.08	wsw.	18.4	1,715	.....	
9:30	960.9	12.5	62	sw.	4.0	1,508	839.7	3.6	0.73	67	5.30	sw.	17.8	1,478	.....	Distant thunder.
						1,500	840.2	3.7	.....	67	5.33	sw.	17.8	1,470	0	
						1,250	866.3	5.5	.....	67	6.05	sw.	17.9	1,225	0	
9:39	960.9	12.4	64	sw.	4.5	1,194	872.6	5.9	0.86	67	6.22	sw.	18.0	1,171	0	8/10 A.St., w.; 2/10 A.Cu., w.
						1,000	893.4	7.6	.....	66	6.89	sw.	18.0	980	0	
9:49	961.0	12.4	66	sw.	3.6	812	914.1	9.2	0.79	66	7.68	sw.	18.0	796	0	
						750	921.0	9.7	.....	66	7.94	sw.	15.8	735	0	
						500	949.0	11.7	.....	66	9.08	sw.	6.5	490	0	
9:54	961.0	12.5	66	sw.	3.1	396	961.0	12.5	.....	66	9.56	sw.	3.1	388	.....	6/10 A. St., w.; 4/10 St.Cu., w.

April 30, 1916.

A. M.																
7:02	970.2	5.6	88	ne.	4.5	396	970.2	5.6	.....	88	8.01	ne.	4.5	388	.....	10/10 St., ne.
						500	957.8	4.9	.....	87	7.53	ne.	6.4	490	0	
						750	928.9	3.3	.....	85	6.58	nne.	11.1	735	0	
7:13	970.2	5.6	88	ne.	5.4	828	920.1	2.8	0.65	84	6.27	nne.	12.5	812	0	
						1,000	900.1	3.0	.....	82	6.22	ne.	12.9	980	0	
7:32	970.2	5.8	86	ne.	4.9	1,167	882.5	3.1	−0.09	80	6.10	ne.	13.3	1,144	0	
						1,250	873.0	2.3	.....	80	5.77	ne.	13.1	1,225	50	
						1,500	846.5	0.0	.....	70	4.89	nne.	12.4	1,470	90	
7:44	970.2	5.8	87	ne.	4.9	1,624	833.8	−1.2	0.94	80	4.42	nne.	12.0	1,592	265	
						1,750	820.5	−1.9	.....	81	4.23	nne.	12.3	1,715	520	
						2,000	795.2	−3.5	.....	84	3.83	ne.	12.8	1,960	.....	
8:26	970.4	6.2	81	ne.	6.7	2,103	785.0	−4.1	0.61	85	3.68	ne.	13.0	2,061	.....	Altitude of St. base about 2,300m.
						2,250	770.7	−4.7	.....	85	3.50	ne.	15.3	2,205	.....	
						2,500	746.5	−5.8	.....	84	3.15	ne.	19.2	2,450	.....	
8:38	970.5	6.4	80	ne.	6.3	2,726	725.8	−6.8	0.60	84	2.89	ne.	22.8	2,671	.....	
						2,500	747.1	−5.1	.....	84	3.34	ne.	19.2	2,450	.....	
8:48	970.5	6.5	79	ne.	5.8	2,426	754.6	−4.5	0.37	84	3.52	ne.	18.0	2,377	1,010	
8:56	970.6	6.4	79	ne.	5.4	2,318	765.2	−4.1	−1.11	84	3.64	nne.	16.5	2,271	940	
8:58	970.6	6.4	79	ne.	5.4	2,246	772.2	−4.9	0.64	84	3.40	nne.	12.5	2,201	890	
						2,000	796.1	−3.4	.....	83	3.82	nne.	12.3	1,960	720	
						1,750	821.2	−1.8	.....	82	4.31	ne.	12.1	1,715	550	
						1,500	847.0	−0.2	.....	82	4.87	ne.	11.9	1,470	260	
9:14	970.6	6.6	77	ne.	5.4	1,317	866.6	1.0	0.43	81	5.32	ne.	11.7	1,291	30	
						1,250	873.8	1.3	.....	81	5.44	ne.	11.8	1,225	0	
						1,000	901.5	2.4	.....	82	5.95	ne.	12.4	980	0	
9:35	970.6	6.8	78	ne.	5.8	832	920.1	3.1	0.89	83	6.33	ne.	12.7	816	0	
						750	930.0	3.8	.....	82	6.58	ne.	11.5	735	0	
						500	959.4	6.1	.....	78	7.35	ne.	7.8	490	0	
9:40	970.6	7.0	77	ne.	6.3	396	970.6	7.0	.....	77	7.72	ne.	6.3	388	.....	10/10 St., ne.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916.*

May 1, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°C.	%		*m. p. s.*	*m.*	*mb.*	°C.		%	*mb.*		*m. p. s.*	10^3 *ergs.*	*volts.*	
6:34	972.4	2.2	68	nnw.	5.4	396	972.4	2.2	.....	68	4.87	nnw.	5.4	388	.....	4/10 A.Cu., wsw.
						500	959.9	1.7	.....	66	4.56	nnw.	8.6	490	0	
						750	930.5	0.3	.....	61	3.81	nnw.	16.4	735	0	
6:44	972.5	2.8	62	nnw.	4.9	844	919.9	0.0	0.49	59	3.60	nnw.	19.3	828	0	
						1,000	902.0	−0.6	.....	59	3.43	nnw.	18.5	980	0	
6:50	972.5	2.8	60	nnw.	4.0	1,110	889.8	−1.1	0.41	59	3.29	nnw.	17.9	1,088	0	
6:55	972.6	3.0	60	nnw.	4.0	1,178	882.3	−0.8	−0.44	51	2.91	nnw.	13.5	1,155	0	
						1,250	874.0	−1.1	.....	51	2.84	nnw.	13.0	1,225	0	
						1,500	847.0	−2.2	.....	50	2.54	nw.	11.3	1,470	0	2/10Cl.St.,wsw.;4/10A.Cu.,wsw.
						1,750	821.0	−3.3	.....	50	2.32	nw.	9.6	1,715	1,050	
7:35	972.8	3.7	54	n.	4.9	1,758	820.5	−3.3	0.43	50	2.32	nw.	9.5	1,723	1,060	
						2,000	795.4	−4.6	.....	51	2.12	wnw.	11.9	1,960	1,320	2/10 A.Cu., wsw.
						2,250	770.5	−6.0	.....	52	1.91	w.	14.4	2,205	1,590	
						2,500	746.6	−7.3	.....	53	1.74	w.	16.9	2,450	1,860	
						2,750	723.5	−8.7	.....	54	1.57	wsw.	19.4	2,694	2,090	
8:32	972.9	4.7	50	nnw.	4.9	2,883	711.1	−9.4	0.54	55	1.51	wsw.	20.7	2,825	2,090	
						3,000	700.3	−10.1	.....	54	1.39	wsw.	21.8	2,939	2,260	Few Ci.St., wsw.
						3,250	678.0	−11.7	.....	51	1.14	wsw.	24.1	3,184	2,640	
						3,500	656.2	−13.2	.....	49	0.96	wsw.	26.4	3,429	3,000	
						3,750	635.3	−14.8	.....	46	0.77	wsw.	28.7	3,673	3,380	
9:13	972.9	6.1	48	n.	4.0	3,780	632.9	−15.0	0.62	46	0.76	wsw.	29.0	3,703	3,400	
9:17	972.9	6.1	48	n.	4.5	3,792	631.9	−12.4	−21.67	43	0.90	wsw.	31.2	3,714	3,420	Few Ci.St., wsw.
						4,000	615.1	−12.0	.....	36	0.78	wsw.	30.2	3,918	3,630	
9:55	972.9	7.4	44	nnw.	3.6	4,250	595.6	−11.5	−0.20	27	0.61	wsw.	29.0	4,162	3,870	
10:06	972.8	8.0	43	nnw.	3.6	4,383	585.3	−12.1	0.57	25	0.54	wsw.	29.5	4,292	4,000	
						4,250	595.6	−11.2	.....	25	0.58	wsw.	28.5	4,162	3,740	
10:32	972.5	8.5	45	nnw.	3.1	4,077	608.8	−10.0	−0.65	24	0.62	w.	27.1	3,993	3,280	
						4,000	615.1	−10.5	.....	24	0.60	w.	26.3	3,918	3,250	
						3,750	635.3	−12.2	.....	24	0.51	wnw.	23.6	3,673	2,760	
						3,500	656.2	−13.8	.....	24	0.44	wnw.	21.0	3,429	2,270	
10:44	972.4	8.6	45	nw.	3.6	3,462	659.5	−14.0	0.67	24	0.43	wnw.	20.6	3,391	1,780	
						3,250	678.0	−12.6	.....	26	0.53	wnw.	19.7	3,184	1,750	
						3,000	700.3	−10.9	.....	29	0.69	wnw.	18.6	2,939	1,710	
						2,750	723.5	−9.2	.....	32	0.89	wnw.	17.6	2,694	1,160	
						2,500	746.8	−7.6	.....	34	1.09	wnw.	16.5	2,450	840	
						2,250	771.5	−5.9	.....	37	1.37	wnw.	15.4	2,205	530	
						2,000	796.7	−4.2	.....	40	1.72	wnw.	14.4	1,960	.....	
11:16	972.0	9.8	42	nw.	2.7	1,917	805.1	−3.6	0.67	41	1.85	wnw.	14.1	1,879	.....	
						1,750	822.1	−2.5	.....	42	2.08	wnw.	13.0	1,750	.....	
						1,500	848.1	−0.8	.....	43	2.46	wnw.	11.4	1,470	.....	
						1,250	875.0	0.9	.....	44	2.87	wnw.	9.8	1,225	.....	
11:30	971.9	9.8	36	nw.	3.1	1,219	878.7	1.1	0.95	45	2.98	wnw.	9.6	1,195	.....	
						1,000	902.2	3.2	.....	44	3.38	wnw.	8.3	980	.....	
						750	930.5	5.6	.....	44	4.00	wnw.	6.7	735	.....	
11:37	971.8	9.9	37	nw.	3.1	598	948.2	7.0	1.44	43	4.31	wnw.	5.8	586	.....	
						500	959.9	8.4	.....	41	4.52	wnw.	4.7	490	.....	
11:42	971.8	9.9	39	wnw.	3.6	396	971.8	9.9	.....	39	4.76	wnw.	3.6	388	.....	Cloudless.

May 2, 1916.

A. M.																
7:00	968.9	7.8	64	s.	6.3	396	968.9	7.8	.....	64	6.77	s.	6.3	388	.....	8/10 Ci., sw.
						500	956.4	8.5	.....	63	6.99	s.	13.7	490	0	
7:03	968.9	8.0	64	s.	6.3	580	947.6	9.1	−0.71	62	7.17	s.	19.4	569	0	
						750	928.3	8.3	.....	62	6.79	s.	18.1	735	0	
7:13	968.9	8.5	63	s.	4.9	798	923.0	8.1	0.46	62	6.70	s.	17.7	782	0	
7:30	968.9	9.3	60	s.	6.3	958	905.3	8.5	−0.25	58	6.44	ssw.	13.5	939	0	
						1,000	900.8	8.3	.....	56	6.13	ssw.	13.3	980	100	22°-halo, 7:40 to 8:45 a. m.
						1,250	874.1	7.1	.....	45	4.54	ssw.	11.8	1,225	570	
8:01	968.9	10.8	57	s.	8.0	1,308	868.0	6.8	0.49	42	4.15	ssw.	11.5	1,282	680	3/10 Ci., sw.; 7/10 Ci.St., sw.
						1,500	847.8	5.1	.....	52	4.57	ssw.	11.1	1,470	990	
						1,750	822.1	2.8	.....	65	4.86	sw.	10.5	1,715	1,380	
8:37	968.7	11.9	54	s.	13.0	1,763	820.8	2.7	0.90	66	4.90	sw.	10.5	1,728	1,400	
						2,000	797.1	1.0	.....	68	4.47	sw.	10.8	1,960	.....	
9:30	968.7	12.5	54	s.	14.3	2,170	780.4	−0.3	0.74	69	4.11	sw.	11.0	2,127	.....	6/10 Ci., sw.; 3/10 Ci.St., sw.
						2,000	797.1	1.0	.....	67	4.40	sw.	10.5	1,960	.....	
						1,750	822.1	2.8	.....	64	4.78	sw.	9.8	1,715	.....	
10:08	968.8	13.5	50	s.	11.6	1,738	823.2	2.9	0.74	64	4.82	sw.	9.8	1,703	.....	4/10 Ci., wsw.; 3/10 Ci.St., wsw.
						1,500	847.4	4.7	.....	60	5.12	ssw.	10.2	1,470	670	
						1,250	873.6	6.5	.....	55	5.32	ssw.	10.5	1,225	520	
P. M.																
12:03	967.6	16.0	41	s.	9.8	1,127	886.6	7.4	0.98	53	5.46	s.	10.7	1,105	180	5/10 Ci., w.; 4/10 Ci.St., w.
						1,000	900.2	8.6	.....	53	5.92	s.	11.6	980	0	
12:20	967.6	16.1	42	s.	10.3	872	914.2	9.9	1.16	54	6.59	s.	12.5	855	0	
						750	927.6	11.3	.....	51	6.83	s.	11.3	735	0	22-halo, 11:50 a.m. to 12:40 p.m.
						500	955.7	14.2	.....	45	7.29	ssw.	9.0	490	0	
12:29	967.6	15.4	43	ssw.	8.0	396	967.6	15.4	.....	43	7.52	ssw.	8.0	388	.....	5/10 Ci.St., w.; 5/10 St.Cu., w.

May 3, 1916.

A. M.																
7:30	970.2	5.5	77	nw.	2.7	396	970.2	5.5	.....	77	6.95	nw.	2.7	388	.....	Cloudless.
						500	957.9	4.6	.....	72	6.11	nw.	4.3	490	0	
7:55	970.2	6.8	72	nw.	2.7	577	949.0	3.9	0.88	69	5.58	nw.	5.5	566	0	
						750	929.0	3.6	.....	64	5.06	nnw.	7.2	735	0	
						1,000	901.6	3.1	.....	56	4.27	nnw.	9.6	980	0	
8:23	970.2	7.5	69	nnw.	3.6	1,139	885.6	2.9	0.18	52	3.92	n.	11.0	1,117	0	
						1,250	874.3	1.9	.....	52	3.65	n.	10.7	1,225	0	
						1,500	847.2	−0.2	.....	51	3.07	nnw.	10.0	1,470	0	
9:23	970.2	10.3	52	n.	3.6	1,507	846.6	−0.3	0.95	51	3.04	nnw.	10.0	1,477	0	
						1,500	847.2	−0.2	.....	51	3.07	nnw.	10.0	1,470	0	
						1,250	874.3	2.3	.....	51	3.68	nnw.	9.2	1,225	0	
9:54	970.2	11.9	45	nw.	2.7	1,088	891.9	4.0	0.91	51	4.15	nnw.	8.7	1,067	0	
						1,000	901.8	4.7	.....	51	4.36	nnw.	8.3	980	0	
						750	929.7	6.8	.....	50	4.94	nw.	7.1	735	0	
10:01	970.2	12.0	42	wnw.	2.7	626	943.8	8.2	1.83	50	5.44	nw.	6.5	614	0	
						500	957.9	10.5	.....	48	6.10	wnw.	4.4	490	0	
10 07	970.2	12.4	46	wnw.	2.7	396	970.2	12.4	.....	46	6.62	wnw.	2.7	388	.....	Cloudless.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 4, 1916, series (No. 1).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
6:49	959.5	10.0	65	ssw.	10.3	396	959.5	10.0	.....	65	7.98	ssw.	10.3	388	.....	3/10 Cl., nw.; 4/10 Cl.St., nw.
						500	948.1	14.4	.....	58	9.51	ssw.	17.2	490	0	
6:51	959.4	10.1	64	ssw.	9.8	613	935.1	19.1	−4.19	51	11.28	ssw.	24.6	601	0	
6:59	959.4	10.2	64	ssw.	9.8	744	920.8	19.4	−0.23	39	8.79	sw.	23.7	730	0	
						750	920.2	19.4	.....	39	8.79	sw.	23.7	735	0	
						1,000	893.3	18.1	.....	38	7.89	sw.	22.3	980	0	
						1,250	867.6	16.8	.....	36	6.89	sw.	20.9	1,225	0	
7:21	959.3	11.0	59	ssw.	10.3	1,459	846.9	15.7	0.52	35	6.24	sw.	19.8	1,430	0	4/10 Cl.St., nw.
						1,500	842.3	15.4	.....	35	6.12	sw.	19.6	1,470	0	
						1,750	817.9	13.3	.....	36	5.50	sw.	18.6	1,715	0	
						2,000	794.0	11.3	.....	36	4.82	wsw.	17.6	1,960	300	
						2,250	770.8	9.2	.....	37	4.31	wsw.	16.6	2,205	950	
7:52	959.1	12.1	58	ssw.	12.5	2,306	765.4	8.7	0.83	37	4.16	wsw.	16.4	2,360	1,100	
						2,500	747.7	7.1	.....	38	3.83	w.	16.7	2,450	1,200	
9:15	959.0	16.8	45	sw.	8.9	2,731	727.0	5.1	0.85	39	3.43	wnw.	17.0	2,676	1,450	3/10 Cl., nw.; 5/10 Cl.St., nw.
						2,750	725.2	4.9	.....	39	3.38	wnw.	17.0	2,694	1,450	
						3,000	703.2	2.8	.....	39	2.91	wnw.	17.0	2,939	1,330	
						3,250	682.1	0.8	.....	39	2.52	wnw.	16.9	3,184	1,230	
9:25	959.0	16.6	44	wsw.	6.7	3,305	677.2	0.4	1.11	39	2.45	wnw.	16.9	3,238	1,200	
						3,250	682.1	1.2	.....	39	2.60	wnw.	17.4	3,184	.....	9/10 Cl.St., nw.
9:43	959.2	17.3	42	wsw.	8.0	3,055	698.5	3.9	0.81	40	3.23	wnw.	19.0	2,993	850	22°-halo, 9:32 to 10:42 a. m.
						3,000	703.2	4.3	.....	40	3.32	wnw.	18.9	2,939	800	
						2,750	725.2	6.4	.....	40	3.84	wnw.	18.4	2,694	530	
						2,500	747.7	8.4	.....	39	4.30	wnw.	18.0	2,450	280	
10:02	959.4	17.9	42	wsw.	7.6	2,353	761.0	9.6	0.54	39	4.66	wnw.	17.7	2,306	120	
						2,250	770.8	10.2	.....	39	4.86	wnw.	18.3	2,205	20	3/10 Cl., nw.; 5/10 Cl.St., nw.
						2,000	794.0	11.6	.....	39	5.33	wnw.	19.6	1,960	0	
						1,750	817.9	12.9	.....	40	5.95	nw.	21.0	1,715	0	
						1,500	842.3	14.2	.....	40	6.48	nw.	22.4	1,470	0	
						1,250	867.6	15.6	.....	40	7.09	nw.	23.7	1,225	0	
10:51	959.7	19.2	38	nw.	4.5	1,193	874.0	15.9	−0.12	40	7.23	nw.	24.0	1,170	0	
						1,000	893.3	15.7	.....	40	7.14	nw.	19.1	980	0	
11:01	959.7	19.9	39	nw.	5.4	869	908.0	15.5	1.16	40	7.04	nw.	15.8	852	0	
						750	920.2	16.9	.....	40	7.70	nw.	13.0	735	0	
						500	948.1	19.8	.....	39	9.01	nw.	7.0	490	0	
11:12	959.9	21.0	39	nw.	4.5	396	959.9	21.0	.....	39	9.70	nw.	4.5	388	.....	2/10 Cl., w.; 3/10 Cl.St., w.

May 4, 1916, series (No. 2).

A. M.																
11:58	960.5	22.9	35	wnw.	4.9	396	960.5	22.9	.....	35	9.78	wnw.	4.9	388	.....	1/10 Cl., wnw; 4/10 Cl.St., wnw.
						500	949.0	21.8	.....	35	9.14	wnw.	5.8	490	0	
						730	921.7	19.1	.....	36	7.96	nw.	7.9	735	0	
P. M.																
12:05	960.4	23.4	36	wnw.	4.5	880	907.9	17.7	1.07	36	7.29	nw.	9.0	853	0	
						1,000	895.1	16.5	.....	38	7.13	nw.	10.5	980	0	
12:30	960.1	24.2	33	nnw.	7.2	1,216	872.7	14.4	0.98	41	6.72	nnw.	13.1	1,192	0	3/10 Cl.St., wnw.
						1,250	869.0	14.2	.....	41	6.64	nnw.	13.3	1,225	0	
						1,500	843.2	12.4	.....	41	5.90	nnw.	14.7	1,470	0	
						1,750	818.5	10.6	.....	41	5.24	nnw.	16.1	1,715	0	
						2,000	794.4	8.8	.....	41	4.65	nnw.	17.5	1,960	0	
1:15	959.7	25.1	30	nnw.	7.2	2,081	786.7	8.2	0.72	41	4.46	nnw.	18.0	2,039	0	
						2,250	770.8	6.8	.....	42	4.15	nnw.	18.3	2,205	160	
						2,500	747.3	4.6	.....	42	3.56	nnw.	18.7	2,450	390	
						2,750	725.0	2.5	.....	42	3.07	nw.	19.1	2,694	620	
1:45	959.7	25.1	29	nnw.	8.0	2,973	705.1	0.7	0.84	43	2.76	nw.	19.4	2,913	830	Few Cu., nw.
						3,000	702.9	0.5	.....	43	2.72	nw.	19.3	2,939	850	
						3,250	681.5	−1.6	.....	40	2.14	nw.	17.9	3,184	1,090	
						3,500	660.2	−3.7	.....	38	1.70	nw.	16.5	3,429	1,280	
2:11	959.8	25.2	28	nnw.	5.8	3,537	657.2	−4.0	0.76	38	1.66	nw.	16.3	3,465	1,300	Altitude of Cu. base about 3,500 m.
						3,500	660.2	−3.7	.....	39	1.75	nw.	16.2	3,429	1,280	
						3,250	681.5	−2.0	.....	46	2.38	nw.	15.4	3,184	1,110	2/10 Cu., nw.
						3,000	702.9	−0.3	.....	53	3.16	nw.	14.6	2,939	930	
						2,750	725.0	1.4	.....	60	4.06	nw.	13.8	2,694	760	
2:37	959.9	25.4	27	n.	9.8	2,704	729.2	1.7	0.95	61	4.22	nw.	13.7	2,650	650	
						2,500	747.3	3.6	.....	59	4.67	nw.	13.8	2,450	580	
						2,250	770.8	6.0	.....	56	5.24	nw.	13.9	2,205	400	
						2,000	794.4	8.3	.....	53	5.80	nnw.	14.1	1,990	230	
						1,750	818.5	10.7	.....	50	6.44	nnw.	14.2	1,715	50	
3:06	960.1	25.4	28	nnw.	8.5	1,679	826.2	11.4	0.93	49	6.61	nnw.	14.2	1,646	0	3/10 Cu.,nw.
						1,500	843.2	13.1	.....	47	7.09	nnw.	14.1	1,470	0	
						1,250	869.0	15.4	.....	44	7.70	nnw.	13.9	1,225	0	
						1,000	895.1	17.7	.....	42	8.50	nnw.	13.7	980	0	
3:33	960.3	25.3	27	nnw.	8.0	809	915.6	19.5	1.43	40	9.07	nnw.	13.5	703	0	
						750	921.7	20.3	.....	38	9.05	nnw.	12.5	735	0	
						500	949.0	23.9	.....	32	9.49	nnw.	8.1	490	0	
3:41	960.4	25.4	29	nnw.	6.3	396	960.4	25.4	.....	29	9.41	nnw.	6.3	388	.....	4/10 Cu., nw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 4, 1916, series (No. 3).

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^3 *ergs.*	*volts.*	
4:30	960.6	25.1	28	nw.	9.4	396	960.6	25.1	.....	28	8.92	nw.	9.4	388	.....	3/10 Cu., nw.
						500	949.2	24.0	.....	29	8.65	nw.	11.0	490	0	
						750	922.1	21.2	.....	33	8.31	nw.	15.0	735	0	
4:38	960.7	24.8	28	nw.	7.6	763	921.0	21.1	1.09	33	8.26	nw.	15.2	748	0	
						1,000	895.9	18.7	.....	35	7.55	nw.	15.9	980	0	
5:02	960.8	24.8	28	nw.	6.7	1,198	875.6	16.7	1.01	36	6.84	nw.	16.4	1,174	0	
						1,250	870.2	16.2	.....	37	6.82	nw.	16.0	1,225	0	
						1,500	845.1	13.6	.....	39	6.08	nw.	14.3	1,470	0	
5:28	961.1	24.6	28	nw.	6.3	1,648	830.5	12.1	1.02	41	5.79	nw.	13.3	1,615	0	1/10 Cu., nw.
						1,750	820.3	11.1	.....	43	5.68	nw.	13.8	1,715	0	
						2,000	796.0	8.6	.....	48	5.36	nw.	15.0	1,960	0	
						2,250	772.2	6.0	.....	52	4.86	nw.	16.3	2,205	0	
5:42	961.2	24.4	28	nw.	5.4	2,413	757.0	4.3	1.02	55	4.57	nw.	17.1	2,365	140	
						2,500	748.7	3.6	.....	56	4.43	nw.	17.4	2,450	220	
						2,750	725.3	1.7	.....	57	3.94	nw.	18.2	2,694	450	
						3,000	702.9	−0.2	.....	59	3.55	nw.	19.1	2,939	680	
						3,250	681.5	−2.1	.....	60	3.08	nw.	19.9	3,184	880	
6:28	961.6	23.4	33	nnw.	4.9	3,327	675.8	−2.7	0.77	61	2.98	nw.	20.2	3,259	940	
						3,500	661.1	−3.4	.....	52	2.39	nw.	17.7	3,429	1,080	
6:51	961.7	22.7	33	nnw.	3.1	3,691	645.6	−4.2	0.48	42	1.81	nw.	15.0	3,615	.....	Few Cu., nw.
						3,500	661.1	−3.2	.....	50	2.34	nw.	15.8	3,429	.....	
						3,250	681.5	−1.8	.....	60	3.16	nw.	16.8	3,184	.....	
7:20	961.9	21.2	36	nnw.	3.1	3,211	685.9	−1.6	0.81	62	3.32	nw.	17.0	3,146	490	
						3,000	702.9	0.1	.....	63	3.87	nw.	16.3	2,939	370	
						2,750	725.3	2.2	.....	63	4.51	nw.	15.4	2,694	220	
						2,500	748.7	4.2	.....	63	5.20	nw.	14.5	2,450	80	
7:45	962.0	19.8	39	nnw.	2.7	2,364	761.6	5.3	0.87	64	5.70	nw.	14.0	2,317	0	
						2,250	772.2	6.3	.....	62	5.92	nw.	14.0	2,205	0	
						2,000	796.0	8.4	.....	58	6.39	nnw.	13.9	1,960	0	
						1,750	820.3	10.6	.....	54	6.90	nnw.	13.9	1,715	0	
8:06	962.2	19.6	39	nnw.	1.8	1,661	829.3	11.4	0.77	52	7.01	nnw.	13.9	1,628	0	
						1,500	845.1	12.6	.....	51	7.44	nnw	13.7	1,470	0	
						1,250	870.2	14.6	.....	49	8.14	nnw.	13.5	1,225	0	
8:22	962.5	19.0	39	nnw.	1.8	1,167	879.4	15.2	0.92	48	8.29	nnw.	13.4	1,144	0	
						1,000	896.4	16.7	.....	46	8.74	nnw.	13.7	980	0	
8:35	962.7	18.8	39	n.	2.2	764	922.3	18.9	0.03	42	9.17	nnw.	14.2	749	0	
						750	923.5	18.9	.....	42	9.17	nnw.	13.7	735	0	
						500	951.2	19.0	.....	40	8.79	n.	5.6	490	0	
8:40	962.8	19.0	39	n.	2.2	396	962.8	19.0	.....	39	8.57	n.	2.2	388	.....	Cloudless.

May 4, 1916, series (No. 4).

P. M.																
9:28	963.3	18.5	38	n.	2.2	396	963.3	18.5	.....	38	8.09	n.	2.2	388	.....	Cloudless.
						500	951.7	19.6	.....	38	8.67	n.	7.4	490	0	
9:30	963.3	18.5	38	n.	2.2	551	946.0	20.1	−1.03	38	8.94	n.	9.9	540	0	
						750	924.3	19.0	.....	38	8.35	n.	9.2	735	0	
9:40	963.3	18.8	35	n.	1.8	790	920.0	18.8	0.54	38	8.25	n.	9.1	775	0	
						1,000	897.5	17.1	.....	38	7.41	n.	9.6	980	0	
10:08	963.4	17.7	38	n.	1.3	1,234	873.4	15.3	0.70	37	6.43	nnw.	10.2	1,210	0	
						1,000	897.5	16.7	.....	37	7.03	nnw.	9.1	980	0	
10:19	963.4	16.0	46	n.	0.9	909	907.3	17.3	0.90	37	7.31	nnw.	8.7	891	0	
						750	924.3	18.7	.....	37	7.98	n.	6.3	735	0	
10:32	963.4	14.9	51	n.	0.9	599	940.7	20.1	−2.81	37	8.71	n.	4.0	587	0	
						500	951.7	17.3	.....	45	8.89	n.	2.5	490	0	
11:10	963.4	14.4	54	n.	0.9	396	963.4	14.4	.....	54	8.86	n.	0.9	388	.....	

May 5, 1916, series (No. 5).

A. M.																
6:08	965.3	13.2	56	sw.	5.4	396	965.3	13.2	.....	56	8.50	sw.	5.4	388	.....	Few Cl., nw.; few A.Cu., nw.
6:10	965.3	13.2	56	sw.	5.4	487	955.1	20.5	−8.02	44	10.61	sw.	14.1	477	0	
						500	954.0	20.5	.....	43	10.37	sw.	13.9	490	0	
						750	926.1	20.5	.....	34	8.20	sw.	11.4	735	0	
6:22	965.4	13.5	56	sw.	5.4	765	924.9	20.5	0.00	33	7.96	sw.	11.2	750	0	
						1,000	899.7	18.9	.....	33	7.21	sw.	10.8	980	0	
						1,250	874.2	17.2	.....	34	6.67	wsw.	10.4	1,225	0	
						1,500	849.2	15.6	.....	34	6.02	wsw.	10.0	1,470	60	
7:07	965.8	14.8	56	ssw.	4.0	1,531	846.1	15.4	0.67	34	5.95	wsw.	9.9	1,501	100	4/10 A.Cu., nw.
						1,750	824.3	13.4	.....	34	5.23	wsw.	10.7	1,715	360	
						2,000	800.0	11.1	.....	35	4.62	w.	11.6	1,960	500	
						2,250	776.6	8.8	.....	35	3.97	w.	12.5	2,205	500	
8:14	965.9	18.3	48	ssw.	7.2	2,407	762.6	7.4	0.91	35	3.60	w.	13.1	2,359	550	
						2,500	753.9	6.8	.....	37	3.66	w.	12.7	2,450	680	
						2,750	713.5	5.1	.....	42	3.69	w.	11.6	2,694	1,040	
						3,000	709.7	3.4	.....	46	3.50	w.	10.6	2,939	1,320	1/10 Cl.St., nw.; 1/10 A.Cu., nw.
						3,250	688.3	1.6	.....	51	3.50	w.	9.6	3,184	1,300	
						3,500	667.3	−0.1	.....	56	3.39	w.	8.5	3,429	.....	
10:02	966.5	24.0	37	sw.	5.8	3,621	657.3	−0.9	0.68	58	3.29	w.	8.0	3,547	.....	
						3,500	667.3	−0.1	.....	57	3.45	w.	8.5	3,429	.....	
						3,250	688.3	1.6	.....	55	3.77	w.	9.4	3,184	.....	Few Cl.St., nw.
						3,000	709.7	3.4	.....	53	4.13	wsw.	10.4	2,939	.....	
						2,750	731.5	5.1	.....	51	4.48	wsw.	11.3	2,694	380	
10:40	966.0	26.5	31	sw.	8.0	2,626	742.7	5.9	0.93	50	4.64	wsw.	11.8	2,573	310	
						2,500	753.9	7.1	.....	49	4.94	wsw.	11.8	2,450	240	
						2,250	776.6	9.4	.....	48	5.66	wsw.	11.9	2,205	100	
						2,000	800.0	11.7	.....	47	6.46	wsw.	11.9	1,960	0	
10:56	965.8	26.9	29	sw.	8.0	1,892	811.1	12.7	0.77	46	6.76	wsw.	11.9	1,854	0	
						1,750	824.3	13.8	.....	46	7.26	wsw.	11.9	1,715	0	
						1,500	850.1	15.7	.....	46	8.21	wsw.	11.9	1,470	0	
						1,250	875.6	17.6	.....	46	9.26	sw.	12.0	1,225	0	
11:10	965.7	26.8	29	wsw.	10.7	1,100	890.6	18.8	1.01	46	9.98	sw.	12.0	1,078	0	3/10 Cl., nw.
						1,000	901.3	19.8	.....	45	10.40	sw.	11.6	980	0	
						750	927.4	22.3	.....	42	11.31	sw.	10.6	735	0	
11:23	965.5	26.8	29	sw.	8.0	723	930.1	22.6	1.35	42	11.52	sw.	10.5	709	0	
						500	954.0	25.6	.....	32	10.51	sw.	9.7	490	0	22°-halo.
11:27	965.4	27.0	28	sw.	9.4	396	965.4	27.0	.....	28	9.98	sw.	9.4	388	.....	7/10 Cl., nw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 5, 1916, series (No. 6).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
12:30	964.8	28.2	23	sw.	9.4	396	961.8	28.2	.....	23	8.80	sw.	9.4	388	.....	7/10 Cl., nw.; 2/10 Cu., wsw.
						500	953.5	27.1	.....	23	8.25	sw.	10.2	490	0	
						750	926.7	24.5	.....	23	7.07	sw.	12.1	735	0	
12:36	964.8	28.5	22	sw.	9.8	798	921.6	24.0	1.04	23	6.86	sw.	12.5	782	0	
						1,000	900.1	21.5	.....	23	5.90	sw.	13.6	980	0	
12:53	964.6	28.2	21	sw.	8.0	1,245	875.0	18.5	1.23	23	4.90	sw.	15.0	1,220	0	
						1,500	848.7	16.3	.....	27	5.00	sw.	13.5	1,470	0	
						1,750	823.5	14.2	.....	31	5.02	sw.	12.1	1,715	0	Few Cl., nw.; 2/10 Cu., wsw.
2:58	963.4	29.4	22	sw.	8.0	1,945	804.6	12.4	0.87	34	4.90	sw.	11.0	1,908	0	
						2,000	799.1	11.8	.....	34	4.71	sw.	11.1	1,960	0	
						2,250	775.1	9.2	.....	35	4.07	sw.	11.5	2,205	0	3/10 Cl., nw.; few Cu., wsw.
						2,500	752.0	6.7	.....	37	3.63	wsw.	12.0	2,450	0	
						2,750	729.7	4.1	.....	38	3.11	wsw.	12.4	2,694	0	
3:35	963.0	29.5	21	sw.	7.2	2,958	711.2	2.0	1.02	39	2.75	wsw.	12.8	2,898	0	
						2,750	729.7	4.1	.....	38	3.11	wsw.	12.6	2,694	0	
						2,500	752.0	6.6	.....	38	3.70	sw.	12.4	2,450	0	
						2,250	775.1	9.2	.....	37	4.31	sw.	12.2	2,205	0	
3:52	962.9	29.5	20	sw.	8.5	2,008	792.8	11.1	1.03	36	4.76	sw.	12.1	2,027	0	1/10 Cl., nw.; few Cu., wsw.
						2,000	799.1	11.8	.....	36	4.98	sw.	12.0	1,980	0	
						1,750	823.5	14.4	.....	35	5.74	sw.	11.4	1,715	0	
						1,500	848.1	16.9	.....	35	6.74	sw.	10.9	1,470	0	
3:59	962.8	29.6	20	sw.	8.9	1,281	870.0	19.2	1.05	34	7.56	sw.	10.5	1,256	0	
						1,250	873.1	19.5	.....	34	7.71	sw.	10.6	1,225	0	
						1,000	898.7	22.1	.....	30	7.98	sw.	11.2	980	0	
4:25	962.7	29.4	21	sw.	8.9	756	924.2	24.7	1.31	26	8.09	sw.	11.7	741	0	
						750	925.0	24.8	.....	26	8.14	sw.	11.6	735	0	
						500	951.2	28.0	.....	23	8.70	sw.	8.5	490	0	
4:30	962.6	29.4	22	sw.	7.2	396	962.6	29.4	.....	22	9.02	sw.	7.2	388	.....	Few Cl., nw.

May 5, 1916, series (No. 7).

P. M.																
5:09	962.4	28.8	24	sw.	7.6	396	962.4	28.8	.....	24	9.51	sw.	7.6	388	.....	Few Cl., nw.
						500	950.7	27.9	.....	24	9.02	sw.	9.0	490	0	
						750	924.5	25.6	.....	24	7.88	sw.	12.2	735	0	
5:19	962.4	29.0	23	sw.	8.0	759	923.6	25.5	0.91	24	7.83	sw.	12.4	744	0	3/10 Cl., wnw.
						1,000	898.4	22.8	.....	25	6.94	sw.	14.5	980	0	
5:48	962.2	28.5	23	ssw.	8.5	1,233	874.6	20.2	1.12	26	6.16	sw.	16.6	1,209	0	
						1,250	873.0	20.0	.....	27	6.31	sw.	16.5	1,225	0	
						1,500	847.2	17.3	.....	28	5.53	sw.	15.2	1,470	0	
6:03	962.1	28.4	24	ssw.	8.5	1,606	836.9	16.2	1.07	29	5.34	sw.	14.6	1,574	0	
						1,750	822.3	14.9	.....	30	5.08	sw.	14.3	1,715	50	
						2,000	798.1	12.6	.....	32	4.67	sw.	13.7	1,960	200	
						2,250	774.3	10.2	.....	34	4.23	wsw.	13.1	2,205	200	
						2,500	751.2	7.9	.....	36	3.83	wsw.	12.5	2,450	200	
6:46	961.9	26.2	29	ssw.	8.9	2,696	734.1	6.1	0.93	37	3.49	wsw.	12.1	2,642	200	1/10 Cl., wnw.
						2,750	729.2	5.7	.....	37	3.39	wsw.	12.3	2,694	250	
						3,000	707.5	3.8	.....	37	2.97	wsw.	13.2	2,939	480	
						3,250	686.0	1.8	.....	36	2.51	wsw.	14.1	3,184	.....	
7:32	961.8	24.6	32	ssw.	7.2	3,348	677.7	1.0	0.83	36	2.37	wsw.	14.5	3,280	.....	
						3,250	686.0	1.9	.....	36	2.52	wsw.	14.7	3,184	.....	
						3,000	707.5	4.1	.....	36	2.91	wsw.	15.2	2,939	490	
						2,750	729.8	6.3	.....	37	3.53	sw.	15.7	2,694	380	
						2,500	752.0	8.5	.....	37	4.11	sw.	16.2	2,450	270	
8:03	961.8	23.8	33	s.	7.2	2,373	763.4	9.6	0.91	37	4.42	sw.	16.4	2,325	200	Few Cl., wnw.; few St.Cu., ssw.
						2,250	774.9	10.7	.....	37	4.76	sw.	16.7	2,205	170	
						2,000	798.1	13.0	.....	37	5.54	sw.	17.4	1,960	100	
						1,750	822.3	15.3	.....	37	6.43	sw.	18.0	1,715	40	
8:25	961.9	24.0	33	s.	8.5	1,614	835.7	16.5	0.96	37	6.94	sw.	18.3	1,582	0	
						1,500	847.2	17.6	.....	37	7.45	sw.	18.2	1,470	0	
						1,250	872.0	20.0	.....	36	8.42	sw.	18.0	1,225	0	
8:37	962.0	23.7	35	s.	8.5	1,187	878.4	20.6	0.78	36	8.74	sw.	17.9	1,164	0	
						1,000	897.4	22.1	.....	34	9.04	sw.	19.1	980	0	
						750	924.0	24.0	.....	32	9.55	ssw.	20.6	735	0	
						500	950.7	26.0	.....	30	10.09	ssw.	22.2	490	0	
8:54	962.1	24.0	33	ssw.	8.9	486	952.3	26.1	−2.33	30	10.15	ssw.	22.3	476	0	
8:55	962.1	24.0	33	ssw.	8.9	396	962.1	24.0	.....	33	9.85	ssw.	8.9	388	.....	Few St.Cu., ssw.

May 5-6, 1916, series (No. 8).

P. M.																
9:38	962.1	23.6	34	ssw.	8.9	396	962.1	23.6	.....	34	9.90	ssw.	8.9	388	.....	Few St.Cu.
						500	950.7	25.0	.....	35	11.09	ssw.	14.5	490	0	Distant lightning.
9:39	962.1	23.6	34	ssw.	8.9	627	937.1	26.7	−1.34	37	12.96	ssw.	21.3	615	0	
						750	923.8	25.6	.....	37	12.15	ssw.	21.2	735	0	
						1,000	897.7	23.1	.....	36	10.18	ssw.	21.1	980	0	
9:55	962.1	23.0	35	s.	7.2	1,216	876.0	20.9	0.98	36	8.90	ssw.	21.0	1,192	0	
						1,250	872.2	20.6	.....	36	8.74	ssw.	20.7	1,225	0	
						1,500	846.9	18.7	.....	36	7.77	sw.	18.4	1,470	0	
						1,750	822.2	16.8	.....	36	6.89	sw.	16.0	1,715	0	
						2,000	798.2	14.9	.....	37	6.27	sw.	13.7	1,960	90	
						2,250	774.9	13.0	.....	37	5.54	wsw.	11.4	2,205	450	
11:05	961.4	21.6	46	ssw.	8.0	2,347	766.2	12.3	0.76	37	5.29	wsw.	10.5	2,300	520	3/10 St.Cu.
						2,500	752.2	10.8	.....	38	4.92	wsw.	10.9	2,450	620	
						2,750	730.1	8.4	.....	40	4.41	wsw.	11.6	2,694	790	
						3,000	708.5	5.9	.....	42	3.90	wsw.	12.4	2,939	960	
						3,250	687.0	3.5	.....	44	3.45	wsw.	13.1	3,184	.....	
11:20	961.2	21.5	47	ssw.	7.6	3,384	675.8	2.2	1.02	45	3.22	wsw.	13.5	3,315	.....	
						3,250	687.0	3.6	.....	45	3.56	wsw.	14.2	3,184	.....	
						3,000	708.5	6.3	.....	46	4.39	wsw.	15.5	2,939	.....	
						2,750	730.1	8.9	.....	46	5.24	sw.	16.7	2,694	560	
						2,500	752.2	11.6	.....	47	6.42	sw.	18.0	2,450	310	

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 5–6, 1916, series (No. 8)—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
12:11	960.7	20.6	54	SSW.	6.7	2,206	771.0	13.8	0.81	47	7.42	SW.	19.0	2,250	100	Few A.St.
						2,250	774.9	14.2		46	7.45	SW.	19.1	2,205	100	
						2,000	797.9	16.2		45	8.20	SW.	19.3	1,960	60	
						1,750	821.3	18.2		44	9.20	SSW.	19.4	1,715	30	
						1,500	845.5	20.2		43	10.18	SSW.	19.6	1,470	0	2/10 A.St.
						1,250	870.5	22.3		42	11.31	SSW.	19.8	1,225	0	
12:44	960.3	20.4	58	S.	6.3	1,236	872.2	22.4	0.47	42	11.38	SSW.	19.9	1,212	0	
						1,000	895.8	23.5		42	12.16	SSW.	20.7	980	0	
						750	921.8	24.7		42	13.07	S.	21.6	735	0	
1:02	960.1	19.2	62	S.	4.9	619	935.8	25.3	−2.78	42	13.55	S.	22.0	607	0	
						500	948.5	22.0		53	14.01	S.	12.9	490	0	
1:06	960.1	19.1	63	S.	4.9	396	960.1	19.1		63	13.93	S.	4.9	388		3/10 A.St.

May 6, 1916, series (No. 9).

A. M.																
2:01	959.7	18.6	66	S.	4.5	396	959.7	18.6		66	14.14	S.	4.5	388		2/10 A.St., w.
						500	948.0	20.6		61	14.80	S.	9.4	490	0	
2:05	959.7	18.6	67	S.	4.5	749	921.5	25.4	−1.93	49	15.90	SSW.	21.0	734	0	
2:12	959.6	18.2	68	S.	4.9	870	908.7	25.4	0.00	45	14.60	SSW.	23.2	853	0	
						1,000	894.9	24.6		44	13.61	SSW.	23.3	980	0	
						1,250	869.7	23.0		42	11.80	SW.	23.6	1,225	0	
						1,500	845.1	21.4		40	10.20	SW.	23.9	1,470	0	
2:35	959.5	18.2	68	S.	4.9	1,599	835.6	20.8	0.63	39	9.58	SW.	24.0	1,567	0	2/10 A.St., w.
						1,750	821.0	19.6		40	9.12	WSW.	21.6	1,715	320	
						2,000	796.7	17.6		41	8.25	WSW.	17.7	1,960	700	
						2,250	773.8	15.6		42	7.44	W.	13.8	2,205	920	1/10 A.St., w.
3:36	959.0	17.8	70	SSW.	4.0	2,297	769.8	15.2	0.80	42	7.25	W.	13.1	2,251	950	
						2,500	751.1	13.0		44	6.59	W.	14.0	2,450	1,070	Distant lightning.
						2,750	729.2	10.3		47	5.89	W.	15.2	2,694	1,120	
						3,000	707.5	7.5		50	5.18	WNW.	16.4	2,939	1,200	6/10 A.St., w.
						3,250	686.1	4.8		53	4.56	WNW.	17.6	3,184		
4:19	958.7	17.9	68	SW.	8.5	3,282	683.6	4.5	1.08	53	4.46	WNW.	17.7	3,215		7/10 A.St., w.; 3/10 St.Cu., w.
						3,250	686.1	4.8		52	4.47	WNW.	17.7	3,184		
						3,000	707.5	7.5		51	5.29	WNW.	17.6	2,939		
						2,750	729.2	10.1		50	6.18	W.	17.6	2,694		
						2,500	751.1	12.8		49	7.24	W.	17.6	2,450	440	
4:55	958.4	18.1	64	SW.	7.2	2,265	772.2	15.3	0.94	48	8.34	W.	17.5	2,220	110	
						2,250	773.8	15.4		48	8.40	W.	17.5	2,205	100	
						2,000	796.7	17.8		48	9.78	W.	17.3	1,960	0	
						1,750	820.0	20.1		47	11.06	W.	17.1	1,715	0	
5:10	958.4	18.1	64	SW.	7.2	1,678	827.1	20.8	0.85	47	11.55	W.	17.0	1,645	0	5/10 A.St., w.; 5/10 St.Cu., w.
						1,500	844.0	22.3		46	12.39	W.	16.6	1,470	0	
						1,250	868.5	24.4		44	13.45	WNW.	16.0	1,225	0	
5:24	958.4	17.9	65	SW.	7.6	1,054	888.5	26.1	−1.84	42	14.20	WNW.	15.5	1,033	0	
						1,000	893.7	25.1		42	13.39	WNW.	14.5	980	0	
5:28	958.4	17.7	67	SW.	9.4	771	917.6	20.9	1.64	44	10.88	W.	10.0	756	0	
						750	919.9	21.2		44	11.08	W.	10.9	735	0	
5:33	958.4	17.6	67	SW.	7.6	710	924.1	21.9	−1.47	45	11.83	W.	12.6	696	0	
						500	946.6	18.8		60	13.02	WSW.	8.4	490	0	
5:36	958.4	17.3	68	SW.	6.3	396	958.4	17.3		68	13.43	SW.	6.3	388		4/10 A.St., w.; 6/10 St.Cu., w.

May 6, 1916, series (No. 10).

A. M.																
6:13	958.5	17.2	68	SW.	6.7	396	958.5	17.2		68	13.34	SW.	6.7	388		4/10 A.St., w.; 6/10 St.Cu., w.
						500	946.8	21.3		58	14.69	WSW.	11.3	490	0	
6:16	958.5	17.2	68	SW.	6.7	544	942.2	23.0	−3.92	54	15.17	W.	13.2	533	0	
						750	920.1	21.9		50	13.14	W.	12.1	735	0	
6:25	958.6	17.5	69	SW.	8.5	765	918.7	21.8	0.54	50	13.06	W.	12.0	750	0	
6:27	958.6	17.4	70	SW.	8.5	925	902.0	25.3	−2.19	45	14.52	WNW.	15.0	907	0	
						1,000	894.0	24.7		44	13.69	WNW.	15.0	980	0	
						1,250	868.5	22.7		41	11.31	WNW.	15.0	1,225	0	
						1,500	844.0	20.7		38	9.28	WNW.	14.9	1,470	0	
6:45	958.7	17.6	67	SW.	8.0	1,620	832.8	19.7	0.81	37	8.49	WNW.	14.9	1,588	0	
						1,750	820.0	18.4		37	7.83	WNW.	15.1	1,715	0	
						2,000	796.2	15.9		38	6.87	WNW.	15.5	1,960	0	
						2,250	773.2	13.4		39	5.99	W.	15.9	2,205	150	
						2,500	750.7	10.9		40	5.22	W.	16.3	2,450	440	
7:21	958.8	18.4	62	SW.	6.3	2,696	733.2	8.9	1.00	41	4.67	W.	16.6	2,642	565	6/10 A.St., w.; 4/10 St.Cu., w.
						2,750	728.3	8.4		42	4.63	W.	16.7	2,694	630	
						3,000	706.3	5.8		48	4.43	W.	17.0	2,939	500	
						3,250	685.1	3.3		54	4.18	WSW.	17.3	3,184	370	
						3,500	664.5	0.7		60	3.86	WSW.	17.6	3,429	240	
7:47	958.8	18.3	65	SW.	8.5	3,521	663.0	0.5	1.02	61	3.86	WSW.	17.6	3,449	230	
						3,750	644.5	−2.2		72	3.66	WSW.	18.0	3,673	110	Altitude of St.Cu. base about 3,800 m.
8:06	958.8	18.4	65	SW.	5.8	3,978	626.6	−4.8	1.26	82	3.35	WSW.	18.3	3,896	0	
						3,750	644.5	−1.7		74	3.92	WSW.	20.2	3,673	70	Sprinkle at 8:12 a. m.
						3,500	664.9	1.7		65	4.49	W.	22.2	3,429	150	
8:58	959.0	20.2	58	WSW.	4.9	3,487	666.3	1.9	0.99	65	4.56	W.	22.3	3,416	150	
						3,250	685.3	4.2		62	5.12	W.	21.8	3,184	230	
						3,000	706.8	6.7		59	5.79	W.	21.3	2,939	310	
						2,750	728.8	9.1		55	6.36	W.	20.9	2,694	390	2/10 Ci.St., w.; 2/10 A.Cu., w.; 6/10 St.Cu., w.
						2,500	751.3	11.6		52	7.10	W.	20.4	2,450	470	
9:31	959.2	21.6	57	WSW.	7.6	2,343	765.8	13.2	0.89	50	7.58	W.	20.1	2,296	515	
						2,250	773.8	14.0		49	7.83	W.	19.7	2,205	460	
						2,000	797.0	16.2		48	8.84	W.	18.8	1,960	340	
						1,750	821.0	18.5		46	9.80	W.	17.8	1,715	210	
9:46	959.2	22.8	53	WSW.	5.4	1,667	839.1	19.2	0.78	45	10.01	W.	17.5	1,644	170	
						1,500	845.0	20.5		44	10.61	W.	17.0	1,470	100	
						1,250	869.4	22.4		43	11.65	W.	16.3	1,225	0	
						1,000	894.8	24.4		42	12.84	WNW.	15.6	980	0	
10:01	959.3	24.2	49	WSW.	5.4	774	918.7	26.2	−0.41	41	13.95	WNW.	15.0	759	0	
						750	920.9	26.1		41	13.87	WNW.	14.9	735	0	
						500	948.0	25.1		41	13.07	W.	13.7	490	0	
10:09	959.3	25.3	43	W.	6.3	430	955.6	24.8	1.76	41	12.84	W.	13.4	422	0	4/10 Ci., w.; 1/10 A.Cu., w.
10:10	959.3	25.4	43	W.	5.8	396	959.3	25.4		43	13.95	W.	5.8	388		

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 7, 1916.

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10⁵ ergs.*	*volts.*	
5:36	956.4	17.1	77	s.	4.5	396	956.4	17.1	.....	77	15.02	s.	4.5	388	.....	Cloudless.
						500	945.0	19.0	.....	73	16.04	ssw.	6.3	490	0	
5:41	956.4	17.0	77	s.	3.6	708	922.5	22.7	−1.79	64	17.66	sw.	11.5	694	0	
						750	917.9	23.8	.....	61	17.99	sw.	9.6	735	0	
7:40	956.5	20.3	67	s.	6.3	818	910.9	25.5	−2.55	56	18.28	ssw.	6.5	802	0	
						1,000	891.9	25.1	.....	55	17.53	ssw.	7.4	980	0	
						1,250	857.1	24.4	.....	52	15.90	ssw.	8.7	1,225	0	
7:48	956.5	20.6	66	s.	4.0	1,304	862.0	24.3	0.25	52	15.80	ssw.	9.0	1,278	0	
						1,500	842.7	22.5	.....	51	13.90	ssw.	10.4	1,470	150	
						1,750	818.5	20.2	.....	50	11.84	ssw.	12.2	1,715	350	
						2,000	795.0	17.8	.....	48	9.78	ssw.	13.9	1,960	540	6/10 Cl., wnw.
8:26	956.2	21.8	64	s.	5.8	2,215	775.3	15.8	0.94	47	8.44	ssw.	15.4	2,161	.....	
						2,000	795.0	17.8	.....	47	9.58	ssw.	14.0	1,960	470	
						1,750	818.5	20.2	.....	46	10.89	ssw.	12.4	1,715	390	
						1,500	842.7	22.6	.....	46	12.34	ssw.	10.8	1,470	300	
8:40	956.1	22.1	62	ssw.	6.3	1,352	857.0	24.0	0.31	45	13.43	ssw.	9.9	1,325	250	
						1,250	867.1	24.3	.....	45	13.68	ssw.	9.5	1,225	210	
						1,000	891.9	25.1	.....	44	14.02	ssw.	8.7	980	130	
8:45	956.1	22.2	62	ssw.	4.9	839	908.4	25.6	−3.35	44	14.45	ssw.	8.1	823	70	
						750	917.9	22.6	.....	51	13.99	ssw.	7.1	735	50	
8:52	956.1	22.5	61	s.	5.4	657	927.7	19.5	1.23	59	13.38	s.	6.1	644	10	
						500	944.5	21.4	.....	60	15.29	s.	5.7	490	0	22°-halo, 8:35 to 8:55 a. m.
8:55	956.0	22.7	60	s.	5.4	396	956.0	22.7	.....	60	16.55	s.	5.4	388	.....	

May 8, 1916 (No. 1).

A. M.																
6:21	973.3	8.0	63	wnw.	6.3	396	973.3	8.0	.....	63	6.76	wnw.	6.3	388	.....	Cloudless.
						500	960.9	11.8	.....	45	6.23	wnw.	6.1	490	0	
7:00	974.0	9.2	58	wnw.	4.9	540	957.3	13.2	−3.61	38	5.76	wnw.	6.0	529	0	
						750	934.0	11.8	.....	36	4.98	wnw.	4.9	735	0	
7:18	974.2	10.0	50	wnw.	4.0	933	913.7	10.5	0.70	34	4.32	wnw.	4.0	915	0	
						750	934.0	11.8	.....	34	4.71	wnw.	5.3	735	0	
7:27	974.3	10.3	57	wnw.	4.9	554	956.0	13.2	−1.77	33	5.01	wnw.	6.6	543	0	
						500	961.2	12.2	.....	41	5.83	wnw.	6.0	490	0	
7:30	974.3	10.4	57	wnw.	4.9	396	974.3	10.4	.....	57	7.19	wnw.	4.9	388	.....	Cloudless.

May 8, 1916 (No. 2).

P. M.																
2:55	971.2	24.0	22	sw.	4.5	396	971.3	24.0	.....	22	6.56	sw.	4.5	388	.....	Cloudless.
						500	959.3	21.8	.....	22	5.75	sw.	5.0	490	0	
3:05	971.2	24.1	23	sw.	4.0	610	947.4	19.5	2.10	22	4.99	sw.	5.5	598	0	
5:15	970.2	23.2	25	sw.	7.2	745	931.8	19.0	0.37	23	5.05	sw.	7.1	730	0	
						1,000	903.3	16.5	.....	23	4.32	sw.	8.0	980	0	
						1,250	877.5	14.1	.....	24	3.86	sw.	8.9	1,225	0	
5:27	970.1	23.0	25	sw.	5.8	1,350	867.6	13.1	0.96	24	3.62	sw.	9.2	1,323	0	
						1,250	877.5	14.0	.....	24	3.84	sw.	9.3	1,225	0	
						1,000	903.3	16.4	.....	24	4.48	sw.	9.4	980	0	
5:35	970.1	22.9	25	sw.	5.4	767	929.2	18.6	1.13	24	5.14	sw.	9.5	752	0	
						750	930.8	18.8	.....	24	5.21	sw.	9.4	735	0	
						500	958.1	21.6	.....	24	6.19	sw.	7.2	490	0	
5:40	970.1	22.8	24	sw.	6.3	396	970.1	22.8	.....	24	6.66	sw.	6.3	388	.....	Cloudless.

May 9, 1916.

A. M.																
7:08	966.1	15.5	49	s.	6.3	396	966.1	15.5	.....	49	8.63	s.	6.3	388	.....	6/10 A.Cu., sw.; 1/10 St.Cu., sw.
						500	954.0	16.5	.....	46	8.63	s.	13.5	490	0	
						750	926.1	18.8	.....	39	8.46	s.	30.9	735	0	
7:12	966.0	15.8	49	sse.	5.8	768	924.7	19.0	−1.21	38	8.35	s.	32.2	753	0	
						1,006	900.0	17.6	.....	36	11.27	s.	26.9	980	110	
7:35	965.6	16.4	47	s.	7.2	1,063	893.2	17.2	0.61	61	11.97	s.	25.5	1,042	550	
						1,250	873.5	15.9	.....	64	11.56	s.	25.5	1,225	690	
8:17	965.1	18.1	42	s.	6.7	1,495	848.9	14.1	0.72	68	10.94	ssw.	25.6	1,465	705	9/10 St.Cu., ssw.
						1,750	822.3	12.4	.....	66	9.50	ssw.	24.3	1,715	1,220	Altitude of St.Cu. base about 1,500 m.
						2,000	798.4	10.8	.....	64	8.29	s.	23.1	1,960	1,580	
						2,250	775.2	9.1	.....	62	7.17	s.	21.8	2,205	1,500	
8:58	964.8	19.9	40	s.	11.6	2,283	772.5	8.9	0.66	62	7.07	s.	21.6	2,237	1,510	10/10 St.Cu., ssw.
9:07	964.6	20.1	41	s.	8.9	2,319	769.1	11.9	−8.33	48	6.69	s.	20.6	2,272	1,530	
						2,500	752.4	11.4	.....	39	5.26	s.	20.2	2,450	1,590	Sky clearing.
						2,750	730.0	10.6	.....	27	3.45	ssw.	19.5	2,694	1,670	
10:06	963.3	22.3	45	s.	9.8	2,883	718.1	10.2	0.52	20	2.49	ssw.	19.3	2,825	.....	Few Ci.St., sw.
						2,750	730.0	11.2	.....	20	2.66	ssw.	19.9	2,694	1,460	
						2,500	751.8	13.0	.....	20	3.00	s.	21.1	2,450	1,040	3/10 Ci.St., sw.; 2/10 A.Cu., ssw.
						2,250	774.2	14.9	.....	20	3.39	s.	22.3	2,205	920	
11:05	961.9	24.7	45	s.	9.4	2,148	783.1	15.7	−0.91	20	3.57	s.	22.8	2,105	870	
						2,000	796.8	14.4	.....	37	6.07	s.	24.6	1,960	790	
11:23	961.2	25.9	46	s.	11.2	1,785	817.5	12.4	0.81	61	8.78	s.	27.3	1,749	550	
						1,750	820.3	12.7	.....	60	8.81	s.	27.1	1,715	510	5/10 Ci., w.
						1,500	844.5	14.8	.....	59	9.93	s.	25.9	1,470	260	
						1,250	869.7	16.8	.....	58	11.10	s.	24.7	1,225	70	
11:43	960.4	26.6	47	s.	14.3	1,159	879.5	17.5	1.00	57	11.40	s.	24.3	1,136	0	
						1,000	895.3	19.1	.....	55	12.16	s.	24.0	980	0	
11:55	959.9	26.5	48	s.	11.6	770	919.7	21.4	1.31	51	13.00	s.	23.5	755	0	
						750	921.5	21.7	.....	51	13.24	s.	22.9	735	0	
						500	948.0	24.8	.....	50	15.66	s.	15.3	490	0	
P. M.																
12:03	959.7	26.3	49	s.	12.1	396	959.7	26.3	.....	49	16.77	s.	12.1	388	.....	5/10 Cl., wnw.; few A.Cu., sw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 10, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10⁵ ergs.*	*volts.*	
7:21	960.3	13.6	43	nnw.	10.3	396	960.3	13.6	.....	43	6.70	nnw.	10.3	388	.....	1/10 Ci., nw.
						500	948.3	12.4	.....	44	6.34	nnw.	15.0	490	0	
7:29	960.5	13.8	42	nnw.	11.2	740	921.8	9.5	1.19	46	5.46	nnw.	26.0	726	0	
						750	920.3	9.4	.....	47	5.54	nnw.	26.1	735	0	
						1,000	893.0	7.0	.....	48	4.81	nnw.	27.6	980	0	
7:39	960.8	14.1	40	nnw.	11.6	1,063	886.5	6.4	0.96	49	4.71	nnw.	28.0	1,042	0	
						1,250	866.3	6.0	.....	45	4.21	nnw.	30.3	1,225	40	Cloudless.
						1,500	840.7	5.5	.....	40	3.61	nw.	33.3	1,470	170	
8:07	961.5	14.6	36	nnw.	9.8	1,666	824.2	5.2	0.20	37	3.27	nw.	35.3	1,633	260	
						1,750	816.0	5.6	.....	35	3.18	nw.	34.2	1,715	170	
						2,000	791.3	6.9	.....	28	2.79	nw.	31.0	1,960	600	
8:20	961.8	14.6	35	nnw.	9.4	2,145	777.8	7.6	−0.50	24	2.51	nw.	29.2	2,102	1,610	
8:35	962.0	14.8	33	nnw.	12.5	2,232	769.6	7.1	0.55	20	2.02	nw.	22.3	2,187	.....	
8:40	962.1	14.8	33	nnw.	15.6	2,070	784.9	7.9	−1.45	14	1.49	nw.	26.3	2,029	.....	
						2,000	791.3	6.9	.....	16	1.59	nw.	26.4	1,960	.....	
						1,750	816.0	3.3	.....	24	1.86	nw.	26.9	1,715	5,360	
8:57	962.4	14.9	31	nnw.	13.4	1,697	821.8	2.5	0.71	26	1.90	nw.	27.0	1,663	4,820	
						1,500	841.5	3.9	.....	31	2.50	nw.	26.9	1,470	3,380	
						1,250	867.9	5.7	.....	37	3.39	nnw.	26.9	1,225	1,280	
9:19	962.8	15.2	29	nnw.	12.5	1,095	885.2	6.8	1.17	41	4.05	nnw.	26.8	1,073	260	
						1,000	895.2	7.9	.....	40	4.26	nnw.	25.8	980	180	
9:29	962.9	15.6	31	nw.	9.8	796	918.0	10.3	1.38	39	4.89	nw.	23.5	780	0	
						750	923.1	10.9	.....	38	4.96	nw.	22.1	735	0	
						500	951.2	14.4	.....	32	5.25	nnw.	14.4	490	0	
9:39	963.1	15.8	29	nnw.	11.2	396	963.1	15.8	.....	29	5.21	nnw.	11.2	388	.....	Cloudless.

May 11, 1916 (No. 1).

A. M.																
7:24	972.9	10.2	41	nnw.	2.7	396	972.9	10.2	.....	41	5.10	nnw.	2.7	388	.....	2/10 Ci.St., wnw.; 7/10 A.St., wnw.
						500	960.7	10.4	.....	42	5.30	n.	5.2	490	0	
7:31	972.9	10.6	45	nnw.	3.6	614	947.8	10.6	−0.18	44	5.62	nne.	8.0	602	0	
						750	932.3	9.7	.....	43	5.17	nne.	5.9	735	0	
8:25	973.2	12.2	38	ne.	2.7	845	922.2	9.1	0.69	42	4.86	nne.	4.5	828	0	
						750	932.3	9.8	.....	41	4.97	nne.	4.0	735	0	
						500	960.9	11.6	.....	40	5.46	ne.	2.7	490	0	
8:31	973.3	12.4	39	ne.	2.2	396	973.3	12.4	.....	39	5.62	ne.	2.2	388	.....	1/10 Ci.St., w.; 9/10 A.St., w.

May 11, 1916 (No. 2).

P. M.																
1:55	972.9	17.0	33	sse.	4.0	396	972.9	17.0	.....	33	6.40	sse.	4.0	388	.....	10/10 Ci. St., w.
						500	960.3	15.3	.....	33	5.74	sse.	5.3	490	0	
3:30	972.4	16.7	32	sse.	4.5	638	945.0	13.1	1.61	32	4.83	sse.	7.0	625	50	5/10 Ci. St., w.; 5/10 A. Cu., w.
						750	931.5	12.3	.....	31	4.44	sse.	7.2	735	100	
						1,000	904.2	10.7	.....	30	3.86	se.	7.8	980	200	
4:04	972.2	16.7	32	se.	5.8	1,188	884.4	9.4	0.67	29	3.42	se.	8.2	1,165	.....	
						1,250	877.5	8.8	.....	29	3.29	se.	8.0	1,225	.....	
						1,500	851.3	6.6	.....	29	2.83	sse.	7.0	1,470	.....	3/10 Ci.St., w.; 4/10 A.Cu., w.; 3/10 St.Cu., w.
4:41	972.1	16.0	31	sse.	5.4	1,536	847.9	6.3	0.84	29	2.77	sse.	6.9	1,505	.....	
						1,500	851.3	6.6	.....	29	2.83	sse.	7.1	1,470	370	
						1,250	877.5	8.6	.....	31	3.46	se.	8.3	1,225	260	
4:59	972.0	15.9	31	sse.	4.5	1,244	878.2	8.6	0.61	31	3.46	se.	8.3	1,220	260	
						1,000	904.2	10.1	.....	32	3.96	sse.	8.6	980	150	
						750	931.5	11.6	.....	32	4.37	sse.	8.9	735	40	
5:16	972.0	14.9	36	s.	5.4	691	938.5	12.0	0.95	33	4.63	s.	9.0	678	20	
						500	959.8	13.8	.....	36	5.68	s.	6.3	490	0	
5:23	972.0	14.8	37	s.	4.9	396	972.0	14.8	.....	37	6.23	s.	4.9	388	.....	2/10 A.St., w.; 8/10 St.Cu., w.

May 12, 1916.

P. M.																
12:46	972.3	10.7	86	ese.	11.2	396	972.3	10.7	.....	86	11.07	ese.	11.2	388	.....	10/10 St.Cu., ese.
						500	960.1	9.7	.....	85	10.23	ese.	12.4	490	0	
						750	931.7	7.3	.....	83	8.49	ese.	15.2	735	0	
12:55	972.2	10.8	83	ese.	11.2	825	923.2	6.6	0.96	82	8.00	ese.	16.0	809	0	Altitude of St. Cu. base about 850 m.
						1,000	903.7	5.6	.....	81	7.37	ese.	17.8	980	740	
1:08	972.2	10.8	84	ese.	11.6	1,202	881.7	4.4	0.58	80	6.70	ese.	19.8	1,178	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No record of descent.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 13, 1916.

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^6 ergs.*	*volts.*	
12:45	964.0	12.4	96	ese.	6.3	396	964.0	12.4	.....	96	13.82	ese.	6.3	388	.....	10/10 St.Cu., se.
						500	952.0	11.8	.....	96	13.29	ese.	8.0	490	0	Altitude of St. base about 500 m.
12:50	963.9	12.4	96	ese.	6.3	743	924.7	10.5	0.55	95	12.06	se.	12.0	729	6,100	
						750	924.0	12.6	.....	95	13.86	se.	10.1	735	5,900	
1:15	963.6	12.9	95	se.	6.3	871	910.6	14.4	−3.05	94	15.42	sse.	8.5	854	3,500	
						1,000	896.7	13.7	.....	94	14.74	sse.	9.2	980	3,540	
						1,250	870.4	12.3	.....	93	13.31	sse.	10.7	1,225	3,570	
1:35	963.4	13.8	92	se.	6.7	1,476	847.2	11.1	0.55	93	12.29	sse.	12.0	1,447	3,600	
						1,500	844.9	11.0	.....	93	12.21	sse.	12.1	1,470	3,070	
						1,750	819.8	10.1	.....	93	11.49	s.	13.3	1,715	2,000	
						2,000	795.1	9.3	.....	92	10.78	s.	14.4	1,960	930	5/10 A.Cu., sw.; 4/10 Fr.St., se.
2:25	962.7	15.6	88	se.	5.4	2,265	771.7	8.4	.....	92	10.14	ssw.	15.6	2,205	280	
						2,465	752.0	7.7	0.34	92	9.67	sw.	16.6	2,415	400	
						2,500	748.5	7.5	.....	92	9.54	sw.	17.3	2,450	450	
						2,750	726.0	6.1	.....	91	8.57	sw.	22.0	2,694	850	
						3,000	704.0	4.8	.....	91	7.83	sw.	26.7	2,939	1,240	
						3,250	682.8	3.4	.....	90	7.02	sw.	31.4	3,184	1,650	
2:36	962.5	15.8	88	se.	4.0	3,351	674.5	2.8	0.55	90	6.72	sw.	33.3	3,283	1,800	
						3,500	662.3	2.4	.....	86	6.24	sw.	28.5	3,429	.....	
2:41	962.5	15.8	88	se.	4.5	3,725	644.3	1.7	0.28	81	5.60	sw.	21.3	3,649	.....	
						3,500	662.3	2.3	.....	88	6.34	sw.	20.5	3,429	.....	
3:00	962.1	15.6	88	ese.	5.8	3,310	677.8	2.8	0.36	93	6.95	sw.	19.8	3,243	.....	10/10 St.Cu., ese.
						3,250	682.8	3.1	.....	93	7.10	sw.	19.6	3,184	.....	
						3,000	704.0	4.5	.....	94	7.91	sw.	18.7	2,939	.....	
						2,750	726.0	6.0	.....	94	8.79	ssw.	17.9	2,694	.....	
						2,500	748.5	7.4	.....	95	9.78	ssw.	17.0	2,450	.....	
3:18	962.0	14.7	90	ese.	5.8	2,370	760.2	8.1	0.41	95	10.26	ssw.	16.5	2,322	.....	
						2,250	771.7	8.6	.....	96	10.72	ssw.	15.8	2,205	.....	
						2,000	795.1	9.6	.....	96	11.47	ssw.	14.2	1,960	.....	
						1,750	819.0	10.6	.....	96	12.27	ssw.	12.7	1,715	.....	
3:30	961.9	14.4	90	ese.	4.9	1,634	830.3	11.1	0.45	97	12.81	ssw.	12.0	1,602	.....	
						1,500	843.9	11.7	.....	96	13.20	ssw.	11.9	1,470	.....	
						1,250	869.1	12.8	.....	94	13.89	s.	11.6	1,225	.....	
						1,000	895.1	14.0	.....	91	14.54	sse.	11.4	980	0	
3:52	961.8	14.2	91	ese.	3.6	951	900.5	14.2	−1.75	90	14.57	sse.	11.3	932	0	
3:54	961.8	14.2	91	ese.	3.6	785	918.2	11.3	0.75	94	12.59	se.	9.8	770	0	
						750	922.0	11.6	.....	93	12.70	se.	9.3	735	0	Altitude of St. base about 500 m.
						500	949.7	13.4	.....	92	14.14	ese.	5.9	490	0	
4:01	961.8	14.2	91	ese.	4.5	396	961.8	14.2	.....	91	14.73	ese.	4.5	388	.....	10/10 St., ese.

May 14, 1916.

A. M.																
8:05	955.7	15.5	93	se.	5.8	396	955.7	15.5	.....	93	16.38	se.	5.8	388	.....	7/10 St.Cu., sw.
8:10	955.7	15.5	92	se.	5.8	493	944.9	14.6	0.93	92	15.29	se.	11.6	483	0	Sprinkling from 8:05 to 9 a. m.
						500	944.0	14.7	.....	92	15.39	se.	11.6	490	0	
8:12	955.7	15.5	92	se.	5.8	551	938.3	15.1	−0.86	92	15.79	se.	11.6	540	0	
						750	916.4	13.6	.....	92	14.33	sse.	11.2	735	0	
						1,000	889.5	11.8	.....	93	12.87	sse.	10.7	980	0	
8:45	955.7	16.0	90	sse.	4.5	1,083	881.0	11.2	0.73	93	12.37	s.	10.5	1,062	0	10/10 St.Cu., sw.
						1,250	863.8	11.5	.....	92	12.48	s.	9.6	1,225	0	
9:12	955.6	16.1	87	sse.	3.1	1,311	857.4	11.6	0.22	91	12.43	s.	9.3	1,285	0	
						1,250	863.8	12.0	.....	91	12.77	s.	9.6	1,225	0	
						1,000	889.5	13.5	.....	91	14.08	ssw.	10.9	980	0	
9:20	955.6	15.9	88	ssw.	6.3	895	901.0	14.2	0.28	91	14.73	ssw.	11.5	877	0	Rain began 9:20 a. m.
						750	916.4	14.6	.....	91	15.12	ssw.	9.2	735	0	
						500	944.0	15.3	.....	92	15.99	sw.	5.2	490	0	
9:26	955.5	15.6	92	sw.	3.6	396	955.5	15.6	.....	92	16.30	sw.	3.6	388	.....	10/10 St.Cu., sw.

May 15, 1916.

P. M.																
2:10	961.1	10.4	64	w.	16.1	396	961.1	10.4	.....	64	8.07	w.	16.1	388	.....	8/10 St.Cu., wnw.
						500	949.3	9.1	.....	65	7.51	w.	20.8	490	0	
2:18	961.1	10.7	61	w.	17.9	729	923.1	6.3	1.23	68	6.49	wnw.	31.0	715	0	
						750	920.7	6.1	.....	68	6.41	wnw.	30.9	735	10	
						1,000	892.8	3.8	.....	72	5.77	wnw.	30.2	980	260	
2:30	961.2	10.7	65	wnw.	16.5	1,060	886.5	3.2	0.94	73	5.61	wnw.	30.0	1,039	320	
						1,250	866.0	1.7	.....	75	5.18	wnw.	30.3	1,225	800	
						1,500	840.0	−0.2	.....	77	4.63	wnw.	30.8	1,470	1,500	7/10 St.Cu., wnw.
						1,750	814.2	−2.2	.....	79	4.02	wnw.	31.3	1,715	2,470	
3:10	961.4	11.5	61	nw.	15.2	1,934	795.5	−3.7	0.82	81	3.63	wnw.	31.6	1,896	.....	
						1,750	814.2	−2.2	.....	79	4.02	wnw.	30.2	1,715	.....	
						1,500	840.0	−0.1	.....	76	4.61	wnw.	27.9	1,470	.....	Sprinkling from 3:36 to3:58 p.m.
						1,250	866.0	2.0	.....	74	5.22	nw.	25.6	1,225	.....	
4:00	961.4	11.6	61	wnw.	14.3	1,064	886.5	3.6	1.05	72	5.70	nw.	24.0	1,043	0	Altitude of St.Cu. base about 1,400 m.
						1,000	892.8	4.3	.....	71	5.90	nw.	24.7	980	0	
						750	920.7	6.9	.....	66	6.57	nw.	27.2	735	0	
4:08	961.4	11.3	59	wnw.	14.8	675	929.6	7.7	1.11	64	6.73	nw.	28.0	662	0	
						500	949.3	9.6	.....	60	7.17	nw.	19.4	490	0	
4:14	961.4	10.8	58	nw.	14.3	396	961.4	10.8	.....	58	7.51	nw.	14.3	388	.....	9/10 St.Cu., wnw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 16, 1914.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
7:58	968.2	8.2	63	nw.	8.9	396	968.2	8.2		63	6.85	nw.	8.9	388		5/10 Cl., w.
						500	955.8	6.9		63	6.27	nw.	11.7	490	0	
						750	927.0	3.8		64	5.13	nw.	18.3	735	0	
8:05	968.2	8.3	66	nw.	9.4	778	924.1	3.5	1.23	64	5.02	nw.	19.0	763	0	4/10 Cl., w; 2/10 Cl.St., w.
						1,000	898.7	2.2		61	4.37	nnw.	21.9	980	130	
8:15	968.3	8.4	63	nnw.	7.6	1,159	881.6	1.3	0.58	59	3.96	nnw.	24.1	1,136	320	22°-halo, 8:17 to 11:11 am.
						1,250	871.1	0.7		59	3.79	nnw.	24.4	1,225	470	
						1,500	844.3	−0.8		60	3.43	nnw.	25.2	1,470	1,050	
						1,750	818.4	−2.3		61	3.07	nnw.	26.0	1,715	1,670	
8:50	968.4	9.2	55	nnw.	8.0	1,929	800.9	−3.7	0.65	62	2.78	nnw.	26.6	1,891	2,170	
						2,000	793.5	−3.8		58	2.58	nnw.	27.0	1,960	2,330	
						2,250	769.4	−4.3		44	1.87	nw.	28.6	2,205	2,630	
9:25	968.5	10.1	54	nw.	6.7	2,326	762.0	−4.4	0.18	40	1.69	nw.	29.1	2,279	2,690	
						2,500		−5.8		40	1.50	nw.	28.5	2,450	2,820	
						2,750		−7.7		39	1.24	nw.	27.6	2,694	3,000	
						3,000		−9.6		39	1.05	nw.	26.8	2,939	3,790	8/10 Cl., w.
10:19	968.3	11.6	55	wnw.	7.6	3,071		−10.2	0.78	39	0.99	nw.	26.6	3,009	4,000	
						3,000		−9.6		39	1.05	nw.	26.4	2,939	3,820	
						2,750		−7.6		38	1.22	nw.	25.7	2,694	3,160	
						2,500		−5.7		37	1.40	nw.	25.0	2,450	2,540	
						2,250		−3.7		37	1.66	nw.	24.3	2,205	2,050	
11:14	967.8	12.4	52	nw.	11.6	2,057	789.0	−2.2	0.71	36	1.83	nw.	23.7	2,016	1,800	
						2,000	794.7	−1.8		38	2.00	nw.	23.1	1,960	1,690	6/10 Ci., w.; few Fr.Cu., nw.
						1,750	819.8	0.0		45	2.75	nw.	20.5	1,715	1,260	
						1,500	845.3	1.8		53	3.69	nw.	17.8	1,470	860	
						1,250	872.0	3.6		60	4.75	nw.	15.2	1,225	540	
11:50	967.6	13.3	46	nw.	10.7	1,187	879.1	4.0	1.03	62	5.04	nw.	14.5	1,164	425	
						1,000	899.1	5.9		59	5.48	nw.	14.8	980	270	
P. M.																
12:03	967.6	13.6	46	nw.	10.3	778	924.1	8.2	1.47	56	6.09	nw.	15.1	763	60	
						750	927.0	8.6		56	6.26	nw.	14.6	735	30	
						500	955.6	12.3		52	7.44	nw.	10.3	490	0	
12:14	967.6	13.8	51	nw.	8.5	396	967.6	13.8		51	8.05	nw.	8.5	388		4/10 Ci., w.; few Cu., nw.

May 17, 1916.

A. M.																
7:09	969.3	7.2	87	nw.	5.8	396	969.3	7.2		87	8.84	nw.	5.8	388		Cloudless.
7:10	969.3	7.2	87	nw.	5.8	464	961.3	5.6	2.35	77	7.01	nw.	11.2	455	0	
						500	957.0	5.9		76	7.06	nw.	11.2	490	0	
7:12	969.3	7.1	87	nw.	5.8	667	937.8	7.1	−0.74	74	7.47	nw.	11.2	654	0	
						750	928.1	6.7		73	7.16	nw.	10.4	735	0	
						1,000	901.0	5.4		73	6.55	nw.	8.1	980	50	
8:55	969.3	10.9	75	nw.	4.0	1,137	886.1	4.7	0.51	72	6.15	nw.	6.8	1,115	270	
						1,250	873.8	3.9		71	5.74	nw.	7.5	1,225	330	
						1,500	847.0	2.0		70	4.94	nw.	9.1	1,470	410	
						1,750	821.1	0.2		69	4.28	nw.	10.7	1,715	700	
9:30	969.3	12.4	68	nnw.	4.9	1,945	801.8	−1.2	0.73	68	3.76	nw.	12.0	1,906		2/10 Cu., nnw.
						2,000	796.0	−1.5		67	3.61	nw.	12.6	1,960		
						2,250	772.0	−2.7		64	3.12	nw.	15.3	2,205		
						2,500	748.1	−3.9		60	2.65	nnw.	18.1	2,450		
						2,750	724.7	−5.1		57	2.27	nnw.	20.8	2,694		
10:36	969.3	13.6	63	nnw.	6.3	2,965	704.7	−6.2	0.42	54	1.95	nnw.	23.2	2,905	2,500	4/10 Cu., nnw.
						2,750	724.4	−5.4		55	2.13	nnw.	20.9	2,694	1,980	
						2,500	747.5	−4.5		55	2.30	nnw.	18.3	2,450	1,760	
						2,250	771.2	−3.6		56	2.53	nnw.	15.7	2,205	1,530	
11:05	969.3	13.6	59	nnw.	4.6	2,216	774.8	−3.5	0.74	56	2.55	nnw.	15.3	2,172	1,500	Altitude of Cu. base about 1,500 meters.
						2,000	796.0	−1.9		61	3.18	nnw.	13.9	1,960	1,160	
						1,750	821.1	0.0		66	4.03	nw.	12.3	1,715	770	
						1,500	847.0	1.8		71	4.94	nw.	10.7	1,470	380	6/10 Cu., nnw.
11:22	969.3	14.4	59	nw.	4.9	1,368	861.7	2.8	0.92	74	5.53	nw.	9.9	1,341	170	
						1,250	873.8	3.9		74	5.98	nw.	10.2	1,225	120	
						1,000	901.0	6.2		74	7.02	nnw.	10.7	980	30	
11:37	969.3	14.5	52	nnw.	5.4	944	907.4	6.7	1.18	74	7.26	nnw.	10.8	926	0	
11:49	969.3	14.1	53	nw.	5.8	750	929.1	9.0		69	7.92	nw.	11.7	735	0	
						707	933.9	9.5	1.64	68	8.07	nw.	11.9	693	0	
						500	957.5	12.9		57	8.48	nnw.	7.8	490	0	
11:56	969.3	14.6	52	nnw.	5.8	396	969.3	14.6		52	8.64	nnw.	5.8	388		7/10 Cu., nw.

May 18, 1916.

P. M.																
3:23	969.5	14.3	45	wsw.	5.4	396	969.5	14.3		45	7.34	wsw.	5.4	388		7/10 Cl.St., w; 3/10 A.St., w.
						500	957.2	12.9		48	7.14	wsw.	6.0	490	0	
						750	929.1	9.7		54	6.50	wsw.	7.4	735	0	
4:10	969.3	12.8	57	w.	10.7	831	920.0	8.6	1.31	56	6.26	wsw.	7.9	815	0	
						1,000	901.2	6.9		58	5.77	wsw.	8.0	980	0	
						1,250	874.1	4.5		61	5.14	wsw.	8.1	1,225	0	Rain began 4:22 p. m.
4:30	969.3	11.5	68	w.	7.6	1,343	864.1	3.6	0.89	62	4.90	wsw.	8.1	1,317	0	
						1,250	874.1	4.3		62	5.15	wsw.	8.0	1,225	0	
						1,000	901.2	6.3		62	5.92	wsw.	7.6	980	0	
4:35	969.3	11.1	72	wsw.	7.6	817	921.2	7.8	0.71	62	6.56	wsw.	7.3	801	0	
						750	929.1	8.3		64	7.01	wsw.	7.1	735	0	
						500	957.2	10.1		73	9.02	wsw.	6.5	490	0	
4:39	969.3	10.8	76	wsw.	6.3	396	969.3	10.8		76	9.84	wsw.	6.3	388		2/10 A.St., w.; 8/10 St.Cu., w.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 19, 1916.

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\,m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
5:49	967.8	13.6	87	se.	4.0	396	967.8	13.6	.....	87	13.55	se.	4.0	388	.....	10/10 St.Cu., se.
						500	955.6	12.8	.....	88	13.01	se.	4.9	490	0	
						750	927.7	10.7	.....	89	11.45	se.	7.2	735	0	Altitude of St.Cu. base about 700 m.
6:51	967.8	13.4	89	se.	3.6	937	907.2	9.2	0.81	90	10.48	se.	8.9	919	0	
6:52	967.8	13.4	89	se.	3.6	983	902.2	10.4	−2.28	90	11.35	se.	8.9	964	0	
6:56	967.8	13.3	89	se.	3.1	937	907.2	9.5	0.68	89	10.56	se.	8.9	919	0	
						750	927.7	10.8	.....	89	11.53	se.	6.8	735	0	
						500	955.6	12.5	.....	90	13.04	se.	3.9	490	0	Rain began 7:05 p. m.
7:10	967.8	13.2	90	ese.	2.7	396	967.8	13.2	.....	90	13.65	ese.	2.7	388	.....	10/10 St.Cu., se.

May 20, 1916.

A. M.																
7:12	966.3	12.2	93	ese.	6.3	396	966.3	12.2	.....	93	13.22	ese.	6.3	388	.....	3/10 St.Cu., s.; 7/10 St., se.
						500	954.3	11.7	.....	94	12.92	se.	8.5	490	0	
7:20	966.4	12.4	90	ese.	5.8	755	925.8	10.4	0.50	95	11.98	s.	14.0	740	0	
7:25	966.5	12.4	90	ese.	5.4	930	906.8	11.9	−0.86	91	12.68	s.	16.7	912	0	
						1,000	899.2	11.5	.....	91	12.35	s.	17.0	980	0	
						1,250	872.8	10.2	.....	92	11.45	s.	18.2	1,225	200	
						1,500	847.0	8.9	.....	92	10.49	s.	19.3	1,470	2,700	
7:40	966.7	12.4	90	ese.	4.9	1,530	844.0	8.7	0.53	92	10.35	s.	19.4	1,500	3,330	
						1,750	821.8	7.0	.....	93	9.32	s.	19.5	1,715	7,700	10/10 St., se.
						2,000	796.7	5.1	.....	94	8.26	sse.	19.5	1,960	11,200	
						2,250	772.7	3.2	.....	95	7.31	sse.	19.6	2,205	5,100	Rain 8:20 to 9:30 a. m.
8:50	966.3	12.7	91	ese.	8.9	2,333	764.5	2.6	0.68	95	7.00	sse.	19.6	2,286	.....	
						2,250	772.7	3.1	.....	95	7.25	sse.	19.5	2,205	.....	
						2,000	796.7	4.6	.....	95	8.06	sse.	19.3	1,960	620	
						1,750	821.0	6.0	.....	95	8.88	sse.	19.1	1,715	350	
9:25	965.8	13.4	89	se.	7.6	1,687	827.1	6.4	0.62	95	9.13	sse.	19.0	1,653	260	6/10 St.Cu., sse.; 4/10 St., se.
						1,500	845.9	7.6	.....	94	9.81	sse.	18.4	1,470	160	
						1,250	871.8	9.2	.....	94	10.94	sse.	17.6	1,225	10	
						1,000	898.1	10.7	.....	94	12.10	sse.	16.9	980	0	
9:46	965.4	13.7	89	se.	9.8	863	913.1	11.5	−0.66	93	12.62	sse.	16.5	846	0	
						750	925.2	10.8	.....	94	12.17	sse.	15.1	735	0	
9:56	965.3	13.9	89	se.	8.0	712	929.6	10.5	1.11	94	11.94	sse.	14.6	698	0	Altitude of St. base about 650 meters.
						500	953.2	12.8	.....	91	13.45	se.	9.6	490	0	
10:02	965.2	14.0	89	ese.	7.2	396	965.2	14.0	.....	89	14.22	ese.	7.2	388	.....	10/10 St., sse.

May 21, 1916 (No. 1).

A. M.																
10:36	953.1	17.4	86	s.	6.3	396	953.1	17.4	.....	86	17.09	s.	6.3	388	.....	9/10 St. Cu., s.
						500	941.5	16.3	.....	87	16.12	s.	7.3	490	0	
						750	913.8	13.7	.....	89	13.96	sse.	9.6	735	0	
11:08	952.9	17.8	84	sse.	7.2	762	912.8	13.6	1.04	89	13.87	sse.	9.7	747	0	
						1,000	886.7	12.5	.....	88	12.75	s.	9.2	980	0	
11:35	952.5	17.8	82	s.	6.3	1,124	873.9	12.0	0.44	88	12.35	s.	9.0	1,102	0	
						1,000	886.7	12.5	.....	88	12.75	s.	8.5	980	0	
						750	913.4	13.6	.....	88	13.71	ssw.	7.6	735	0	
11:50	952.3	17.7	83	ssw.	6.3	732	915.4	13.7	1.43	88	13.80	ssw.	7.5	718	0	Thunder heard at 2:29 p. m.
						500	940.8	17.0	.....	82	15.89	ssw.	5.4	490	0	
P. M.																
12:30	952.1	18.5	80	ssw.	4.5	396	952.1	18.5	.....	80	17.04	ssw.	4.5	388	.....	1/10A.Cu.,ssw.;8/10St.Cu.,ssw.

May 21, 1916 (No. 2).

P. M.																
1:58	950.6	19.6	77	wsw.	5.4	396	950.6	19.6	.....	77	17.56	wsw.	5.4	388	.....	6/10 St.Cu., wsw.
						500	939.1	18.7	.....	77	16.61	wsw.	6.3	490	0	
						750	912.0	16.4	.....	78	14.55	wsw.	8.6	735	0	
						1,000	885.3	14.2	.....	79	12.79	wsw.	10.8	980	0	
2:26	950.4	20.0	74	w.	7.2	1,132	871.8	13.0	0.90	79	11.83	wsw.	12.0	1,012	0	Altitude of St.Cu. base about 1,150 m.
						1,250	859.3	12.1	.....	79	11.15	wsw.	12.1	1,225	0	
						1,500	833.9	10.3	.....	78	9.77	wsw.	12.2	1,470	0	
						1,750	809.0	8.5	.....	78	8.66	wsw.	12.3	1,715	200	
						2,000	784.9	6.7	.....	77	7.55	wsw.	12.4	1,960	430	
3:03	950.2	19.7	74	w.	8.0	2,106	775.0	5.9	0.73	77	7.15	wsw.	12.5	2,064	520	
						2,250	761.3	4.9	.....	76	6.58	wsw.	13.4	2,205	630	
						2,500	738.5	3.2	.....	74	5.69	wsw.	15.0	2,450	790	
						2,750	716.3	1.4	.....	72	4.87	wsw.	16.5	2,694	910	
						3,000	694.2	−0.4	.....	70	4.14	wsw.	18.0	2,939	960	
						3,250	672.7	−2.1	.....	68	3.49	wsw.	19.6	3,184	.....	
3:29	950.4	19.8	73	w.	7.6	3,277	670.3	−2.3	0.68	68	3.43	wsw.	19.8	3,210	.....	8/10 St.Cu., wsw.
						3,250	672.7	−2.1	.....	68	3.49	wsw.	19.6	3,184	.....	
						3,000	694.2	−0.4	.....	69	4.08	wsw.	17.9	2,939	.....	
						2,750	716.3	1.2	.....	70	4.66	wsw.	16.1	2,694	.....	
						2,500	738.5	2.9	.....	71	5.35	wsw.	14.4	2,450	.....	
						2,250	761.3	4.6	.....	72	6.11	wsw.	12.7	2,205	270	
						2,000	784.9	6.2	.....	73	6.92	wsw.	10.9	1,960	160	
						1,750	809.0	7.9	.....	74	7.88	wsw.	9.2	1,715	50	
3:54	950.6	19.7	74	wsw.	8.5	1,627	821.6	8.7	0.78	75	8.44	wsw.	8.3	1,505	0	
						1,500	833.9	9.7	.....	75	9.02	wsw.	8.7	1,470	0	
						1,250	859.3	11.6	.....	76	10.38	wsw.	9.5	1,225	0	
						1,000	885.3	13.5	.....	77	11.91	w.	10.3	980	0	
4:23	950.8	19.4	71	w.	9.8	823	904.5	15.0	0.94	78	13.30	w.	11.0	807	0	
						750	912.0	15.7	.....	76	13.56	w.	10.7	735	0	
						500	939.1	18.0	.....	70	14.45	w.	9.8	490	0	
4:31	950.8	19.0	68	w.	9.4	396	950.8	19.0	.....	68	14.94	w.	9.4	388	.....	2/10A.St.,wsw.;8/10St.Cu.,wsw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 22, 1916 (No. 1).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*° C.*	*%*		*m. p. s.*	*m.*	*mb.*	*° C.*		*%*	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
7:51	957.3	13.4	84	w.	5.4	396	957.3	13.4	.....	84	12.91	w.	5.4	388	.....	5/10 St.Cu., wnw.
						500	945.7	12.8	.....	81	11.97	wnw.	8.0	490	0	
8:20	957.5	14.0	80	nw.	5.4	692	924.3	11.6	0.61	76	10.38	nw.	12.7	679	0	2/10 St.Cu., wnw.
						750	917.8	11.9	.....	75	10.45	nw.	12.6	735	0	
8:21	957.5	14.0	80	nw.	4.0	976	893.6	12.9	−0.46	69	10.27	nw.	12.4	957	0	
						1,000	890.8	12.8	.....	68	10.05	nw.	12.7	980	0	
						1,250	864.9	11.8	.....	63	8.72	nw.	16.1	1,225	0	
						1,500	839.5	10.9	.....	58	7.56	wnw.	19.5	1,470	0	
8:46	957.6	14.9	80	nw.	4.0	1,614	828.3	10.5	0.38	55	6.98	wnw.	21.1	1,582	150	
						1,750	815.0	11.2	.....	47	6.25	wnw.	20.7	1,715	330	
8:50	957.6	15.0	80	nw.	4.0	1,775	812.6	11.3	−0.50	46	6.16	wnw.	20.6	1,740	360	1/10 Cu., wnw.
						2,000	791.0	19.1	.....	49	6.06	wnw.	20.2	1,960	650	
						2,250	767.8	8.2	.....	53	5.76	wnw.	19.8	2,205	780	
						2,500	745.0	6.3	.....	57	5.44	wnw.	19.4	2,450	835	
9:17	957.8	15.7	76	nw.	4.5	2,510	744.0	6.2	0.69	57	5.40	wnw.	19.4	2,460	835	
						2,750	722.8	4.5	.....	58	4.88	wnw.	19.5	2,694	1,120	
						3,000	701.0	2.6	.....	58	4.27	w.	19.7	2,939	1,410	
						3,250	680.0	0.8	.....	59	3.82	w.	19.9	3,184	1,640	
10:44	958.3	18.1	70	w.	4.9	3,475	661.2	−0.8	0.73	60	3.43	w.	20.0	3,404	1,740	Few Cu., w.
						3,500	659.2	−0.2	.....	61	3.67	w.	20.3	3,429	1,740	
10:46	958.3	18.1	69	w.	4.9	3,513	658.1	0.2	−2.63	61	3.78	w.	20.5	3,441	1,750	
						3,750	639.3	−1.0	.....	55	3.09	w.	20.0	3,673	1,790	
11:12	958.3	19.1	70	w.	4.9	3,901	627.0	−1.7	0.86	51	2.70	w.	19.6	3,821	.....	
						3,750	639.0	0.2	.....	51	3.16	w.	18.5	3,673	1,690	
11:22	958.1	19.2	70	w.	4.5	3,739	639.8	0.3	−2.00	51	3.18	w.	18.4	3,662	1,670	
11:33	958.0	19.2	64	w.	4.5	3,694	643.0	−0.6	0.41	50	2.90	w.	20.4	3,618	1,600	
						3,500	659.2	0.2	.....	55	3.41	w.	20.1	3,429	1,310	
						3,250	680.0	1.2	.....	62	4.13	w.	19.8	3,184	1,020	
						3,000	701.0	2.3	.....	69	4.97	w.	19.5	2,939	850	
P. M.																
12:04	957.7	19.8	59	w.	2.7	2,800	718.5	3.1	0.83	75	5.72	w.	19.2	2,743	705	
						2,750	722.8	3.5	.....	75	5.89	w.	19.1	2,694	670	
						2,500	745.0	5.6	.....	73	6.64	w.	18.4	2,450	440	
						2,250	768.1	7.7	.....	71	7.46	w.	17.6	2,205	220	
12:21	957.6	20.8	57	w.	2.7	2,007	791.2	9.7	0.51	69	8.30	w.	16.9	1,967	0	Cloudless.
						2,000	792.0	9.7	.....	69	8.30	w.	16.9	1,960	0	
						1,750	816.3	11.0	.....	66	8.67	w.	15.6	1,715	0	
						1,500	841.1	12.3	.....	62	8.87	w.	14.3	1,470	0	
12:40	957.5	21.3	55	w.	2.7	1,454	845.3	12.5	0.63	61	8.84	w.	14.1	1,425	0	
						1,250	866.1	13.8	.....	62	9.78	w.	12.2	1,225	0	
						1,000	892.0	15.4	.....	62	10.85	w.	10.0	980	0	
						750	918.7	16.9	.....	63	12.13	w.	7.7	735	0	
12:48	957.5	21.4	55	wsw.	2.2	639	930.8	17.6	1.56	63	12.68	w.	6.7	626	0	
						500	945.9	19.8	.....	58	13.40	wsw.	5.9	490	0	
12:53	957.4	21.4	54	wsw.	3.6	396	957.4	21.4	.....	54	13.77	wsw.	3.6	388	.....	Cloudless.

May 22, 1916 (No. 2).

P. M.																
2:42	957.4	23.2	54	s.	5.4	396	957.4	23.2	.....	54	15.36	s.	5.4	388	.....	2/10 St.Cu., wsw.
						500	946.0	22.1	.....	56	14.90	s.	5.8	490	0	
						750	918.8	19.3	.....	60	13.43	ssw.	6.9	735	0	
3:12	957.4	23.2	53	s.	6.3	907	902.4	17.6	1.10	63	12.68	ssw.	7.5	889	0	
						1,000	892.3	16.7	.....	65	12.36	ssw.	8.1	980	0	
						1,250	866.6	14.2	.....	69	11.17	sw.	9.6	1,225	0	
						1,500	841.3	11.7	.....	73	10.04	wsw.	11.2	1,470	0	
3:47	957.4	23.1	54	sw.	5.4	1,558	835.6	11.1	1.00	74	9.78	wsw.	11.6	1,527	0	4/10 St.Cu., wsw.
						1,750	816.7	9.5	.....	74	8.78	wsw.	12.8	1,715	190	
						2,000	792.1	7.4	.....	75	7.72	wsw.	14.4	1,960	570	
						2,250	768.5	5.4	.....	76	6.82	wsw.	16.0	2,205	910	
4:10	957.4	23.2	57	sw.	5.8	2,289	765.0	5.1	0.82	76	6.68	wsw.	16.3	2,243	930	Altitude of St.Cu. base about 2,300 m.
						2,500	745.0	3.8	.....	75	6.02	wsw.	16.6	2,450	1,050	
						2,750	722.9	2.3	.....	73	5.26	w.	17.0	2,694	1,190	7/10 St.Cu., wsw.
4:22	957.4	23.1	56	sw.	6.3	2,759	722.0	2.3	0.60	73	5.26	w.	17.0	2,703	.....	
4:45	957.4	23.0	57	sw.	5.4	2,930	707.2	3.0	−0.34	66	5.00	w.	20.6	2,871	.....	
5:02	957.4	22.6	62	sw.	4.5	2,876	711.8	1.6	0.64	76	5.21	w.	16.1	2,818	.....	9/10 St.Cu., wsw.
						2,750	722.9	2.4	.....	75	5.44	w.	15.4	2,694	.....	
						2,500	745.0	4.0	.....	75	6.10	w.	14.0	2,450	640	
5:17	957.4	22.4	62	sw.	3.6	2,301	763.9	5.3	0.81	74	6.59	w.	12.9	2,255	490	6/10 A. St., w.; 4/10 St.Cu., w.
						2,250	768.5	5.7	.....	74	6.78	w.	13.1	2,205	480	
						2,000	792.1	7.8	.....	73	7.72	w.	14.0	1,960	370	
						1,750	816.7	9.8	.....	73	8.85	w.	14.9	1,715	260	
5:33	957.4	22.3	64	sw.	3.1	1,720	819.8	10.0	0.95	73	8.96	w.	15.0	1,686	250	
						1,500	841.3	12.1	.....	71	10.03	w.	13.9	1,470	150	
						1,250	866.6	14.4	.....	69	11.32	wsw.	12.6	1,225	40	
5:48	957.4	22.2	67	sw.	3.1	1,160	876.0	15.3	0.88	68	11.82	wsw.	12.2	1,137	0	Sprinkling from 5:44 to 5:55 p. m.
						1,000	892.3	16.7	.....	68	12.93	sw.	10.6	980	0	
						750	918.8	18.9	.....	69	15.07	sw.	8.0	735	0	Thunderstorm west of station.
						500	946.0	21.1	.....	69	17.27	ssw.	5.5	490	0	
6:06	957.7	22.0	69	ssw.	4.5	396	957.7	22.0	.....	69	18.24	ssw.	4.5	388	.....	4/10 A. St., w.; 5/10 St.Cu., w.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 23, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^6 ergs.*	*volts.*	
4:35	965.0	23.6	55	sse.	3.6	396	965.0	23.6	.....	55	16.02	sse.	3.6	388	.....	3/10 Cl., w.; 3/10 Cu., s.
						500	953.3	23.2	.....	56	15.93	sse.	5.1	490	0	
4:48	964.9	23.8	53	sse.	4.0	692	932.8	22.4	0.41	59	15.98	sse.	7.9	679	0	5/10 Cl., w.; 2/10 Cu., s.
						750	926.1	21.9	.....	59	15.51	sse.	7.8	735	0	
						1,000	899.7	19.6	.....	58	13.23	sse.	7.2	980	0	
5:20	964.8	23.1	52	sse.	3.6	1,232	876.0	17.5	0.76	58	11.60	sse.	6.7	1,208	0	
						1,000	899.7	18.9	.....	58	12.67	sse.	5.7	980	0	
						750	926.1	20.4	.....	58	13.90	sse.	4.7	735	0	
5:29	964.8	23.2	54	sse.	3.1	664	935.4	21.0	0.67	58	14.42	sse.	4.3	651	0	
						500	953.3	22.1	.....	57	15.16	sse.	3.6	490	0	
5:34	964.8	22.8	57	sse.	3.1	396	964.8	22.8	.....	57	15.82	sse.	3.1	388	.....	2/10 Cl. St.,w.; 6/10 St. Cu., s.

May 24, 1916.

A. M.																
6:38	962.5	18.8	85	sse.	6.3	396	962.5	18.8	.....	85	18.44	sse.	6.3	388	.....	Few A. Cu., sw.; few Cu., s.
						500	950.7	19.0	.....	86	18.89	sse.	9.7	490	0	
						750	923.2	19.3	.....	88	19.70	sse.	17.7	735	0	
6:49	962.5	19.1	85	sse.	8.0	787	919.8	19.4	−0.15	88	19.83	sse.	18.9	772	0	
						1,000	897.0	18.8	.....	87	18.88	s.	17.8	980	0	
						1,250	871.2	18.2	.....	86	17.97	s.	16.5	1,225	0	
7:03	962.5	19.7	84	sse.	8.0	1,317	864.9	18.0	0.26	86	17.75	ssw.	16.2	1,291	0	
7:05	962.4	19.8	84	sse.	8.9	1,500	846.7	19.9	−1.04	68	15.80	ssw.	17.5	1,470	0	
7:12	962.4	20.1	82	sse.	8.0	1,586	838.2	19.9	0.00	66	15.34	ssw.	19.2	1,554	30	
						1,750	822.2	18.9	.....	65	14.20	ssw.	19.7	1,715	120	
						2,000	798.8	17.5	.....	65	13.00	sw.	20.5	1,960	250	
7:24	962.2	20.6	81	sse.	9.4	2,153	784.5	16.6	0.58	64	12.09	sw.	21.0	2,110	330	Few A. Cu., sw.
						2,250	775.5	15.8	.....	64	11.49	sw.	21.3	2,205	400	
						2,500	752.8	13.6	.....	65	10.13	sw.	22.2	2,450	580	
7:45	962.0	21.2	80	se.	10.7	2,604	743.6	12.7	0.86	65	9.55	sw.	22.5	2,552	660	
						2,750	730.8	11.7	.....	65	8.94	sw.	23.0	2,694	800	
						3,000	709.1	10.0	.....	65	7.98	sw.	23.9	2,939	.....	
8:10	961.8	21.9	82	se.	8.0	3,024	707.0	9.8	0.95	65	7.88	sw.	24.0	2,963	.....	
						3,000	709.1	10.1	.....	65	8.03	sw.	23.9	2,939	.....	
						2,750	730.1	13.1	.....	62	9.35	sw.	23.0	2,694	.....	
8:55	961.8	23.3	82	se.	10.7	2,570	746.0	15.3	0.84	60	10.43	sw.	22.3	2,518	540	
						2,500	752.0	15.9	.....	60	10.84	sw.	23.5	2,450	470	
						2,250	774.8	18.0	.....	59	12.18	sw.	27.7	2,205	410	
9:01	961.8	23.3	82	se.	10.3	2,022	795.2	19.9	−0.06	58	13.48	sw.	31.6	1,982	350	
						2,000	797.5	19.9	.....	58	13.48	sw.	31.5	1,960	350	
9:16	961.8	23.8	80	sse.	8.9	1,895	807.1	19.8	−3.62	57	13.17	sw.	30.8	1,857	310	
						1,750	820.5	14.6	.....	81	13.46	sw.	20.4	1,715	190	
9:22	961.8	23.7	80	se.	7.6	1,721	823.7	13.5	0.30	86	13.30	sw.	18.3	1,687	160	9/10 St.Cu.,s.; few Fr.Cu.,se.
						1,500	844.5	14.2	.....	86	13.92	sw.	17.2	1,470	0	
						1,250	869.6	14.9	.....	87	14.74	ssw.	15.9	1,225	0	
9:44	961.8	24.0	82	s.	6.7	1,213	874.7	15.0	0.67	87	14.83	ssw.	15.7	1,189	0	Altitude of St.Cu. base about 1,050 m.
						1,000	896.0	16.4	.....	87	16.23	ssw.	14.7	980	0	
						750	922.8	18.1	.....	87	18.07	s.	13.5	735	0	
9:55	961.8	23.6	80	s.	6.3	735	924.9	18.2	1.65	87	18.18	s.	13.4	721	0	
						500	950.1	22.1	.....	83	22.06	s.	8.1	490	0	
10:02	961.8	23.8	81	s.	5.8	396	961.8	23.8	.....	81	23.89	s.	5.8	388	.....	2/10 Cl., w.; 7/10 St. Cu., s.

May 25, 1916, series (No. 1).

A. M.																
7:17	958.8	22.0	79	ssw.	11.6	396	958.8	22.0	.....	79	20.89	ssw.	11.6	388	.....	Few Cu., ssw.
						500	.....	21.3	.....	82	20.77	ssw.	14.0	490	0	
						750	.....	19.7	.....	90	20.96	ssw.	19.8	735	0	
7:29	958.8	22.4	78	ssw.	11.2	930	.....	18.5	0.66	95	20.34	ssw.	24.0	912	0	
						1,000	.....	19.4	.....	83	18.70	ssw.	25.3	980	0	
7:35	958.8	22.4	78	ssw.	11.2	1,233	.....	22.3	−1.25	43	11.58	ssw.	29.8	1,209	0	
						1,250	.....	21.8	.....	49	12.80	ssw.	30.1	1,225	0	
7:37	958.8	22.5	78	ssw.	11.2	1,360	.....	18.5	2.99	89	18.96	sw.	31.7	1,333	0	
7:39	958.8	22.5	78	ssw.	10.7	1,383	.....	27.3	−38.26	32	11.62	sw.	22.5	1,356	0	
						1,500	.....	27.3	.....	25	9.08	sw.	20.4	1,470	0	Altitude of Cu. base about 1,050 m.
7:54	958.8	22.8	80	ssw.	8.9	1,634	.....	27.4	−0.04	18	6.57	sw.	17.9	1,602	0	
						1,750	.....	26.2	.....	17	5.78	sw.	17.8	1,715	0	
						2,000	.....	23.7	.....	15	4.40	sw.	17.5	1,960	170	1/10 Cu., ssw.
8:24	958.9	23.4	79	ssw.	10.3	2,177	.....	21.9	1.01	14	3.68	sw.	17.3	2,133	380	
						2,250	.....	21.1	.....	14	3.50	sw.	16.5	2,205	430	
						2,500	.....	18.2	.....	14	2.93	sw.	13.7	2,450	570	
						2,750	.....	15.4	.....	14	2.45	sw.	10.9	2,694	.....	
9:16	958.9	24.3	78	ssw.	8.9	2,831	.....	14.5	1.02	14	2.31	sw.	10.0	2,774	.....	
						2,750	.....	15.2	.....	14	2.42	sw.	10.1	2,694	.....	5/10 Cu., sw.
						2,500	.....	17.5	.....	14	2.80	sw.	10.6	2,450	300	
						2,250	.....	19.8	.....	14	3.23	sw.	11.0	2,205	50	
						2,000	.....	22.1	.....	14	3.72	sw.	11.4	1,960	0	
						1,750	.....	24.4	.....	14	4.28	sw.	11.8	1,715	0	
9:43	958.9	25.0	76	sw.	11.6	1,533	.....	26.4	0.68	14	4.82	sw.	12.2	1,503	0	
						1,500	.....	26.6	.....	14	4.88	sw.	13.4	1,470	0	
10:00	958.8	25.3	75	sw.	11.2	1,416	.....	27.2	−5.26	14	5.05	sw.	16.3	1,388	0	
						1,250	.....	18.5	.....	47	10.01	sw.	17.2	1,225	0	
10:05	958.8	25.2	74	sw.	11.2	1,241	.....	18.0	12.16	49	10.11	sw.	17.2	1,217	0	
10:07	958.8	25.2	74	sw.	11.2	1,190	.....	24.2	−7.85	39	11.78	sw.	18.5	1,167	0	
10:11	958.8	25.3	74	sw.	11.2	1,111	.....	18.0	1.05	97	20.02	sw.	15.6	1,089	0	
						1,000	.....	19.2	.....	88	19.58	ssw.	14.9	980	0	
10:23	958.8	25.8	75	ssw.	12.5	816	.....	21.1	1.14	72	18.02	s.	13.8	800	0	
						750	.....	21.9	.....	73	19.18	s.	13.3	735	0	
						500	.....	24.7	.....	73	22.72	s.	11.5	490	0	
10:29	958.8	25.9	74	s.	10.7	396	958.8	25.9	.....	74	24.73	s.	10.7	388	.....	3/10 Cu., sw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 25, 1916, series (No. 2).

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*° C.*	*%*		*m. p. s.*	*m.*	*mb.*	*° C.*		*%*	*mb.*		*m. p. s.*	*10^3 ergs.*	*volts.*	
11:25	958.5	27.4	71	SSW.	11.2	396	958.5	27.4	.....	71	25.92	SSW.	11.2	388	.....	3/10 Cu., sw.
						500	.....	25.8	.....	74	24.59	SSW.	11.4	490	0	
11:30	958.4	27.3	71	SSW.	11.6	749	.....	22.1	1.50	80	21.28	SW.	12.0	734	0	
						1,000	.....	20.2	.....	87	20.69	SW.	13.2	980	0	
						1,250	.....	18.2	.....	93	19.44	SW.	14.4	1,225	0	
11:42	958.3	27.6	72	SW.	9.4	1,271	.....	18.0	0.79	94	19.40	SW.	14.5	1,246	0	
11:47	958.2	27.6	72	SW.	9.4	1,408	.....	24.0	−4.38	24	7.16	SW.	15.1	1,380	0	2/10 Cu., sw.
						1,500	.....	23.3	.....	23	6.58	SW.	15.7	1,470	0	
						1,750	.....	21.5	.....	20	5.13	SW.	17.3	1,715	80	
						2,000	.....	19.7	.....	18	4.13	SW.	18.9	1,960	230	
						2,250	.....	17.9	.....	15	3.08	SW.	20.5	2,205	370	
P. M.																
12:35	957.9	28.8	63	SW.	9.4	2,486	.....	16.2	0.72	12	2.21	SW.	22.0	2,436	490	
						2,500	.....	16.1	.....	12	2.20	SW.	22.0	2,450	500	
						2,750	.....	13.9	.....	12	1.91	SW.	21.8	2,694	580	
						3,000	.....	11.8	.....	12	1.66	SW.	21.7	2,939	670	
						3,250	.....	9.6	.....	12	1.43	SW.	21.5	3,184	750	
1:07	957.7	29.1	60	SW.	10.7	3,261	.....	9.5	0.83	12	1.42	SW.	21.5	3,195	755	
						3,250	.....	9.6	.....	12	1.43	SW.	21.4	3,184	750	
						3,000	.....	11.6	.....	11	1.50	SW.	21.2	2,939	690	1/10 Cu., sw.
						2,750	.....	13.6	.....	10	1.56	SW.	20.9	2,694	620	
						2,500	.....	15.6	.....	9	1.59	SW.	20.7	2,450	530	
1:55	957.4	30.1	58	SW.	8.9	2,326	.....	17.0	0.68	8	1.55	SW.	20.5	2,279	380	
						2,250	.....	17.5	.....	8	1.60	SW.	20.3	2,205	330	
						2,000	.....	19.2	.....	8	1.78	SW.	19.6	1,960	190	
						1,750	.....	20.9	.....	8	1.98	SW.	19.0	1,715	40	
2:08	957.4	30.2	61	SW.	10.3	1,692	.....	21.3	−4.90	8	2.03	SW.	18.9	1,658	0	
2:10	957.3	30.2	62	SW.	10.7	1,641	.....	18.8	1.43	22	4.77	SW.	16.8	1,608	0	
2:11	957.3	30.1	62	SW.	8.9	1,571	.....	19.8	−0.78	36	8.32	SW.	16.3	1,540	0	
						1,500	.....	19.2	.....	46	10.24	SW.	14.1	1,470	0	
2:12	957.3	30.1	62	SW.	8.9	1,456	.....	18.9	0.63	52	11.36	SW.	12.8	1,427	0	
						1,250	.....	20.2	.....	72	17.05	SW.	11.8	1,225	0	
2:18	957.3	30.2	62	SW.	10.3	1,141	.....	20.9	1.37	82	20.27	SW.	11.2	1,119	0	
						1,000	.....	22.8	.....	75	20.82	SSW.	11.1	980	0	
2:36	957.2	30.3	62	SSW.	10.7	761	.....	26.1	1.18	64	21.64	S.	10.9	746	0	
						750	.....	26.2	.....	64	21.77	S.	10.9	735	0	
						500	.....	29.2	.....	62	25.13	SSW.	10.8	490	0	
2:43	957.1	30.4	61	SSW.	10.7	396	957.1	30.4	.....	61	26.49	SSW.	10.7	388	.....	2/10 Cu., sw.

May 25, 1916, series (No. 3).

P. M.																
3:20	956.9	30.6	58	SSW.	9.4	396	956.9	30.6	.....	58	25.48	SSW.	9.4	388	.....	2/10 Cu., sw.
						500	.....	29.5	.....	61	25.16	SSW.	9.9	490	0	
						750	.....	27.0	.....	67	23.89	SSW.	11.3	735	0	
3:29	956.9	30.6	60	SSW.	10.3	759	.....	26.9	1.02	67	23.75	SSW.	11.3	744	0	
						1,000	.....	24.2	.....	74	22.35	SSW.	11.8	980	0	
3:40	956.9	30.4	59	SSW.	11.6	1,201	.....	22.0	1.11	80	21.15	SSW.	11.8	1,177	0	
						1,250	.....	22.5	.....	69	18.81	SSW.	11.8	1,225	0	
3:48	956.8	30.5	62	SSW.	9.4	1,430	.....	24.3	−1.00	30	9.12	SSW.	12.0	1,402	0	Few Ci., w.; 2/10 Cu., ssw.
						1,500	.....	22.8	.....	40	11.10	SSW.	12.5	1,470	0	Altitude of Cu. base about 1,650 m.
						1,750	.....	17.4	.....	76	15.10	SW.	14.1	1,715	110	
3:58	956.8	30.6	62	SSW.	8.5	1,761	.....	17.2	2.15	78	15.30	SW.	14.2	1,726	120	
4:01	956.8	30.6	62	SSW.	7.2	1,991	.....	20.4	−1.39	28	6.71	SW.	16.3	1,951	250	
						2,000	.....	20.3	.....	28	6.67	SW.	16.4	1,960	260	
						2,250	.....	18.3	.....	29	6.10	SW.	18.3	2,205	400	
						2,500	.....	16.3	.....	30	5.56	SW.	20.1	2,450	360	
						2,750	.....	14.3	.....	31	5.05	SW.	22.0	2,694	460	
4:48	956.5	30.0	65	SSW.	10.7	2,896	.....	13.1	0.81	32	4.83	SW.	23.1	2,837	515	3/10 Cu., ssw.
						2,750	.....	14.3	.....	31	5.05	SW.	22.0	2,694	410	
						2,500	.....	16.3	.....	28	5.19	SW.	20.1	2,450	260	
						2,250	.....	18.4	.....	26	5.50	SSW.	18.2	2,205	260	
						2,000	.....	20.4	.....	23	5.51	SSW.	16.3	1,960	160	
5:26	956.4	29.4	67	SSW.	10.3	1,821	.....	21.8	−1.32	21	5.49	SSW.	15.0	1,785	90	
						1,750	.....	20.9	.....	35	8.65	SSW.	15.0	1,715	60	
5:30	956.4	29.6	65	SSW.	9.8	1,609	.....	19.0	1.64	63	13.84	SSW.	15.0	1,577	0	Few Ci., w.; 1/10 Cu., ssw.
						1,500	.....	20.8	.....	86	21.13	SSW.	13.9	1,470	0	
5:35	956.4	29.4	67	SSW.	12.5	1,469	.....	21.3	−0.86	92	23.30	SSW.	13.6	1,440	0	
5:37	956.4	29.3	68	SSW.	12.5	1,318	.....	20.0	1.01	90	21.04	SSW.	13.6	1,292	0	
						1,250	.....	20.7	.....	88	21.49	SSW.	14.0	1,225	0	
						1,000	.....	23.2	.....	79	22.47	SSW.	15.3	980	0	
5:58	956.4	29.2	65	SSW.	13.0	763	.....	25.6	0.93	70	22.99	SSW.	16.6	748	0	
						750	.....	25.7	.....	70	23.12	SSW.	16.4	735	0	
						500	.....	28.0	.....	68	25.71	SSW.	11.7	490	0	
6:05	956.4	29.0	67	SSW.	9.8	396	956.4	29.0	.....	67	26.85	SSW.	9.8	388	.....	Few Ci., w.; few Cu., ssw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 25, 1916, series (No. 4).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
6:45	956.4	28.4	71	ssw.	8.9	396	956.4	28.4	.....	71	27.48	ssw.	8.9	388	.....	Few Cl., w.; few Cu., ssw.
						500	.....	27.7	.....	73	27.12	ssw.	11.4	490	0	
						750	.....	26.1	.....	76	25.70	ssw.	17.5	735	0	
6:53	956.4	28.4	71	ssw.	10.7	789	.....	25.9	0.64	77	25.73	ssw.	18.5	774	0	
						1,000	.....	23.6	.....	86	25.05	ssw.	19.3	980	0	
7:03	956.4	28.4	69	ssw.	11.6	1,096	.....	22.6	1.07	90	24.69	ssw.	19.7	1,074	0	
						1,250	.....	21.2	.....	93	23.42	ssw.	19.5	1,225	0	
						1,500	.....	19.0	.....	99	21.75	ssw.	19.3	1,470	0	
7:15	956.4	29.1	71	ssw.	11.2	1,570	.....	18.4	0.89	100	21.16	ssw.	19.2	1,539	0	
						1,750	.....	19.1	.....	62	13.71	ssw.	17.1	1,715	0	
7:24	956.4	28.0	72	ssw.	9.8	1,846	.....	19.5	−0.40	41	9.29	ssw.	16.0	1,809	0	3/10 St.Cu., ssw.
						2,000	.....	19.1	.....	44	9.73	ssw.	18.1	1,960	140	
7:36	956.4	28.0	72	ssw.	8.0	2,156	.....	18.6	0.29	47	10.07	ssw.	20.2	2,113	270	5/10 St.Cu., ssw.
						2,250	.....	17.9	.....	47	9.64	ssw.	20.1	2,205	350	
						2,500	.....	16.0	.....	46	8.36	ssw.	19.8	2,450	450	9/10 St.Cu., ssw.
						2,750	.....	14.0	.....	44	7.03	ssw.	19.4	2,694	470	Altitude of St. Cu. base about
8:13	956.3	27.0	79	s.	5.4	2,914	.....	12.7	0.76	43	6.32	ssw.	19.2	2,855	490	2,800 m.
						2,750	.....	13.9	.....	42	6.67	ssw.	20.4	2,694	450	
						2,500	.....	15.8	.....	41	7.36	ssw.	22.2	2,450	400	
						2,250	.....	17.6	.....	39	7.85	ssw.	23.9	2,205	350	
						2,000	.....	19.5	.....	38	8.61	ssw.	25.7	1,960	320	
8:56	956.0	26.2	80	s.	5.8	1,913	.....	20.2	−1.13	37	8.76	ssw.	26.3	1,875	300	1/10 St.Cu., ssw.
						1,750	.....	18.4	.....	74	15.66	ssw.	25.8	1,715	280	
9:03	956.0	26.1	79	s.	7.2	1,656	.....	17.3	0.67	96	18.96	ssw.	25.5	1,623	260	Distant lightning.
						1,500	.....	18.4	.....	93	19.68	ssw.	25.5	1,470	210	
						1,250	.....	20.1	.....	88	20.71	ssw.	25.5	1,225	120	2/10 St.Cu., ssw.
						1,000	.....	21.7	.....	84	21.81	s.	25.5	980	30	
9:25	956.2	26.0	77	s.	8.9	750	.....	23.4	0.73	79	22.74	s.	25.5	735	0	
						500	.....	25.2	.....	77	24.69	s.	13.5	490	0	
9:41	956.3	26.0	76	s.	8.5	396	956.3	26.0	.....	76	25.55	s.	8.5	388	.....	4/10 St.Cu., ssw.

May 25-26, 1916, series (No. 5).

P. M.																
10:28	956.4	25.4	76	s.	10.3	396	956.4	25.4	.....	76	24.66	s.	10.3	388	.....	4/10 St.Cu., ssw.
						500	.....	24.5	.....	78	23.98	s.	12.9	490	0	
10:35	956.4	25.4	77	s.	9.8	738	.....	22.6	0.82	84	23.04	s.	19.0	724	0	
						750	.....	22.5	.....	84	22.90	s.	19.1	735	0	Distant lightning.
						1,000	.....	21.3	.....	87	22.04	s.	21.3	980	0	
						1,250	.....	20.0	.....	91	21.28	ssw.	23.6	1,225	0	
						1,500	.....	18.8	.....	94	20.40	ssw.	25.8	1,470	190	8/10 St.Cu., ssw.
11:08	956.4	24.8	79	s.	9.8	1,546	.....	18.6	0.41	95	20.36	ssw.	26.2	1,515	260	
						1,500	.....	18.7	.....	94	20.28	ssw.	25.9	1,470	240	
						1,250	.....	19.5	.....	90	20.40	ssw.	24.1	1,225	150	
						1,000	.....	20.3	.....	86	20.49	ssw.	22.4	980	50	10/10 St.Cu., ssw.
						750	.....	21.1	.....	82	20.52	ssw.	20.6	735	0	
A. M.																
12:03	956.4	24.4	79	ssw.	10.3	601	.....	21.6	1.27	80	20.64	ssw.	19.6	589	0	
						500	.....	22.9	.....	80	22.34	ssw.	14.3	490	0	
12:12	956.3	24.2	79	ssw.	8.9	396	956.3	24.2	.....	79	23.86	ssw.	8.9	388	.....	10/10 St.Cu., ssw.

May 26, 1916, series (No. 6).

A. M.																
1:28	955.7	23.2	82	s.	5.8	396	955.7	23.2	.....	82	23.32	s.	5.8	388	.....	Few Cu., ssw.
						500	.....	22.6	.....	84	23.04	s.	7.8	490	0	
						750	.....	21.3	.....	89	22.54	ssw.	12.7	735	0	
						1,000	.....	19.9	.....	94	21.85	ssw.	17.6	980	0	
						1,250	.....	18.6	.....	99	21.22	sw.	22.5	1,225	.....	
1:56	955.3	23.0	83	s.	7.6	1,276	.....	18.5	0.52	100	21.30	sw.	23.0	1,251	.....	Distant lightning.
						1,250	.....	18.6	.....	100	21.43	sw.	22.6	1,225	.....	
						1,000	.....	19.9	.....	98	22.08	ssw.	18.5	980	0	
						750	.....	21.2	.....	91	22.91	ssw.	14.3	735	0	
						500	.....	22.5	.....	86	23.44	s.	10.2	490	0	
2:40	954.8	23.0	84	s.	8.5	396	954.8	23.0	.....	84	23.60	s.	8.5	388	.....	Few Cu., ssw.

May 26, 1916, series (No. 7).

A. M.																
3:19	955.0	22.5	86	ssw.	9.4	396	955.0	22.5	.....	86	23.44	ssw.	9.4	388	.....	1/10 Cu., ssw.
						500	.....	21.9	.....	88	23.13	ssw.	12.1	490	0	
						750	.....	20.6	.....	92	22.33	sw.	18.7	735	0	
4:03	955.7	22.3	87	ssw.	9.8	1,000	.....	19.2	.....	96	21.36	sw.	25.3	980	0	2/10 St.Cu., ssw.
						1,006	.....	19.2	0.54	96	21.36	sw.	25.5	986	0	
						1,250	.....	18.0	.....	95	19.61	sw.	25.8	1,225	200	
						1,500	.....	16.8	.....	95	18.17	sw.	26.0	1,470	410	
						1,750	.....	15.5	.....	95	16.73	sw.	26.3	1,715	.....	
4:07	955.7	22.4	86	ssw.	9.4	1,854	.....	15.0	0.50	94	16.03	sw.	26.4	1,817	.....	
						2,000	.....	15.6	.....	94	16.66	sw.	23.8	1,960	.....	
4:10	955.6	22.4	86	ssw.	9.4	2,046	.....	15.8	−0.30	94	16.87	sw.	23.0	2,005	.....	
						2,000	.....	15.7	.....	94	16.77	sw.	22.2	1,960	.....	
						1,750	.....	15.3	.....	94	16.34	sw.	17.9	1,715	.....	
4:15	955.6	22.3	87	ssw.	8.9	1,694	.....	15.2	0.45	94	16.23	sw.	16.9	1,660	565	
						1,500	.....	16.1	.....	94	17.20	sw.	16.5	1,470	440	7/10 St.Cu., wsw.
						1,250	.....	17.2	.....	94	18.44	sw.	16.0	1,225	270	Altitude of St.Cu. base about
						1,000	.....	18.4	.....	94	19.89	sw.	15.4	980	70	1,300 m.
						750	.....	19.5	.....	94	21.31	sw.	14.9	735	0	10/10 St.Cu., wsw.
5:20	955.7	22.3	88	ssw.	8.5	606	.....	20.1	1.00	94	22.12	sw.	14.6	594	0	
						500	.....	21.2	.....	91	22.91	ssw.	12.0	490	0	
5:25	955.8	22.2	89	ssw.	9.4	396	955.8	22.2	.....	89	23.83	ssw.	9.4	388	.....	10/10 St.Cu., wsw.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 26, 1916, series (No. 8).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
6:14	956.8	17.3	81	nw.	7.6	396	956.8	17.3	.....	81	16.00	nw.	7.6	388	.....	5/10 St.Cu., wsw.
						500	.....	16.4	.....	84	15.67	nw.	8.7	490	0	
						750	.....	14.3	.....	90	14.67	nw.	11.5	735	0	
6:25	957.1	16.7	76	nw.	8.0	891	.....	13.1	0.85	94	14.18	nw.	13.0	874	0	
						1,000	.....	13.7	.....	94	14.74	wnw.	11.8	980	0	
						1,250	.....	15.0	.....	95	16.20	w.	9.0	1,225	0	3/10 A.St.,sw.; 3/10 St.Cu., sw.
7:21	958.3	16.4	76	nw.	6.3	1,386	.....	15.7	−0.52	96	17.13	wsw.	7.5	1,359	0	Altitude of St.Cu. base about 1,400 m.
						1,500	.....	13.4	.....	96	14.76	wnw.	5.1	1,470	50	
9:20	959.6	18.1	70	nnw.	4.9	1,521	.....	13.0	2.00	96	14.38	nw.	4.7	1,491	60	Altitude of St.Cu. base about 1,100 m.
						1,750	.....	14.4	.....	71	11.64	wnw.	7.2	1,715	170	
						2,000	.....	15.9	.....	44	7.95	wnw.	10.0	1,960	300	3/10 A.Cu., sw.; 4/10 St.Cu., sw.
9:23	959.7	18.2	69	nnw.	4.5	2,114	.....	16.6	−0.61	32	6.04	w.	11.2	2,072	350	
						2,250	.....	16.0	.....	25	4.54	wsw.	12.2	2,205	430	
9:35	959.8	18.8	68	nnw.	4.0	2,368	.....	15.5	0.43	18	3.17	sw.	13.0	2,320	490	
						2,500	.....	14.4	.....	18	2.95	sw.	14.3	2,450	570	
						2,750	.....	12.3	.....	17	2.43	sw.	16.8	2,694	730	
						3,000	.....	10.2	.....	16	1.99	sw.	19.3	2,939	890	
10:12	960.2	19.6	64	n.	4.0	3,184	.....	8.6	0.70	15	1.68	sw.	21.1	3,119	980	5/10 Ci., sw.
						3,000	.....	9.6	.....	16	1.91	sw.	19.5	2,939	840	
						2,750	.....	11.0	.....	18	2.36	sw.	17.2	2,694	630	
						2,500	.....	12.4	.....	19	2.74	wsw.	15.0	2,450	480	
10:50	960.4	20.3	61	nw.	6.3	2,246	.....	13.8	0.17	20	3.16	wsw.	12.8	2,201	330	1/10 Ci., sw.
						2,000	.....	14.3	.....	38	6.19	wsw.	13.1	1,960	190	
						1,750	.....	14.7	.....	55	9.20	w.	13.4	1,715	40	
11:00	960.5	20.8	65	nw.	5.8	1,690	.....	14.8	−0.23	59	9.93	w.	13.5	1,656	0	
						1,500	.....	14.4	.....	67	10.99	wnw.	11.3	1,470	0	
						1,250	.....	13.8	.....	78	12.31	wnw.	8.4	1,225	0	
11:20	960.5	21.3	62	nw.	5.8	1,081	.....	13.4	0.81	85	13.06	nw.	6.5	1,060	0	
						1,000	.....	14.1	.....	82	13.19	nw.	6.9	980	0	
						750	.....	16.1	.....	73	13.36	nw.	8.3	735	0	
11:33	960.5	21.1	63	nnw.	4.0	661	.....	16.8	1.74	70	13.39	nw.	8.8	648	0	
						500	.....	19.6	.....	65	14.83	nnw.	6.2	490	0	
11:39	960.5	21.4	61	nnw.	4.5	396	960.5	21.4	.....	61	15.55	nnw.	4.5	388	.....	1/10 Ci., sw.

May 26, 1916, series (No. 9).

P. M.																
12:20	960.4	22.2	54	nw.	5.4	396	960.4	22.2	.....	54	14.46	nw.	5.4	388	.....	1/10 Ci., sw.
						500	.....	21.3	.....	54	13.68	nw.	6.2	490	0	
						750	.....	19.2	.....	54	12.02	nw.	8.0	735	0	
						1,000	.....	17.1	.....	54	10.53	nw.	9.8	980	0	
						1,250	.....	15.0	.....	53	9.04	nw.	11.6	1,225	70	
						1,500	.....	12.9	.....	53	7.89	nw.	13.5	1,470	140	
1:17	960.2	23.4	52	nw.	4.5	1,646	.....	11.7	0.84	53	7.29	nw.	14.6	1,613	180	4/10 Ci., sw.
						1,750	.....	11.7	.....	50	6.88	wnw.	14.7	1,715	210	
						2,000	.....	11.8	.....	44	6.09	w.	15.0	1,960	280	
						2,250	.....	11.9	.....	38	5.29	wsw.	15.3	2,205	350	
1:37	960.3	23.7	51	nw.	4.5	2,264	.....	11.9	−0.03	38	5.29	wsw.	15.3	2,219	360	
						2,500	.....	10.3	.....	36	4.51	wsw.	17.3	2,450	480	
						2,750	.....	8.6	.....	34	3.80	wsw.	19.4	2,694	620	
						3,000	.....	6.8	.....	31	3.06	sw.	21.6	2,939	750	
						3,250	.....	5.1	.....	28	2.46	sw.	23.7	3,184	930	
						3,500	.....	3.4	.....	26	2.03	sw.	25.8	3,429	1,130	6/10 Ci., sw.
2:29	960.6	24.6	48	nw.	4.9	3,646	.....	2.4	0.54	25	1.82	sw.	27.0	3,571	1,240	
						3,500	.....	3.0	.....	26	1.97	sw.	25.2	3,429	1,120	
						3,250	.....	4.0	.....	28	2.28	wsw.	22.1	3,184	910	
						3,000	.....	4.9	.....	30	2.60	wsw.	19.0	2,939	.....	
						2,750	.....	5.8	.....	32	2.95	wsw.	15.9	2,694	.....	
						2,500	.....	6.8	.....	35	3.46	w.	12.8	2,450	.....	
3:14	960.8	24.9	43	nw.	2.2	2,401	.....	7.2	0.79	36	3.66	w.	11.6	2,353	.....	
						2,250	.....	8.4	.....	39	4.30	w.	11.0	2,205	.....	
						2,000	.....	10.4	.....	44	5.55	wnw.	9.6	1,960	.....	
						1,750	.....	12.4	.....	48	6.91	wnw.	8.1	1,715	.....	
						1,500	.....	14.4	.....	52	8.53	wnw.	6.6	1,470	.....	
						1,250	.....	16.3	.....	56	10.38	nw.	5.2	1,225	.....	
3:27	960.8	24.8	45	nw.	3.1	1,156	.....	17.0	1.05	58	11.24	nw.	4.7	1,133	.....	
						1,000	.....	18.6	.....	55	11.79	nw.	4.2	980	.....	
						750	.....	21.2	.....	50	12.59	nnw.	3.4	735	.....	
						500	.....	23.9	.....	46	13.64	nnw.	2.5	490	.....	
3:45	960.8	25.0	44	nnw.	2.2	396	960.8	25.0	.....	44	13.94	nnw.	2.2	388	.....	4/10 Ci., wsw.

May 27, 1916.

P. M.																
12:44	964.1	24.2	33	w.	5.4	396	964.1	24.2	.....	33	9.97	w.	5.4	388	.....	1/10 Cu., w.
						500	953.0	23.2	.....	33	9.39	w.	5.5	490	0	
						750	925.5	21.0	.....	33	8.21	wnw.	5.7	735	0	
1:28	964.1	24.8	35	wnw.	5.8	993	899.9	18.8	0.95	33	7.16	wnw.	5.9	974	0	
						750	925.5	21.2	.....	33	8.31	wnw.	4.8	735	0	
						500	953.0	23.8	.....	33	9.73	w.	3.6	490	0	
1:45	964.1	24.8	33	w.	3.1	396	964.1	24.8	.....	33	10.33	w.	3.1	388	.....	2/10 Cu., w.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 28, 1916.

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
9:30	966.5	22.2	64	sse.	4.0	396	966.5	22.2	.....	64	17.13	sse.	4.0	388	.....	4/10 Cl.St., w.; 3/10 A.Cu., wsw.
						500	954.9	21.2	.....	64	16.12	sse.	4.9	490	0	
9:50	966.5	22.4	67	sse.	4.9	691	934.1	19.5	0.92	63	14.28	sse.	6.5	678	0	
						750	927.9	19.1	.....	62	13.71	s.	6.8	735	0	
						1,000	901.3	17.4	.....	60	11.92	s.	8.0	980	0	
						1,250	875.1	15.8	.....	58	10.41	s.	9.1	1,225	0	
10:20	966.3	22.7	63	s.	4.9	1,494	850.1	14.2	0.66	56	9.07	ssw.	10.2	1,465	0	1/10 Cl.St., w.; few A.Cu., wsw.
						1,500	849.5	14.1	.....	56	9.01	ssw.	10.2	1,470	0	
						1,750	824.0	12.1	.....	56	7.91	ssw.	8.6	1,715	0	
11:40	965.4	24.6	43	sse.	7.2	1,852	813.9	11.2	0.84	56	7.45	ssw.	8.0	1,815	50	4/10 Ci., w.
						2,000	799.2	10.1	.....	55	6.80	ssw.	7.5	1,960	240	
						2,250	775.7	8.3	.....	53	5.80	s.	6.7	2,205	.....	
P. M.																
12:05	965.1	25.2	41	sse.	6.3	2,487	753.7	6.5	0.64	52	5.03	s.	5.9	2,437	.....	8/10 Cl.St., w.
						2,250	775.7	7.8	.....	54	5.71	s.	6.7	2,205	.....	
						2,000	799.2	9.2	.....	55	6.40	s.	7.5	1,960	.....	
12:28	964.9	24.0	43	s.	5.4	1,885	810.3	9.8	1.02	56	6.79	s.	7.9	1,847	.....	5/10 Cl.St., w.; 4/10 A.Cu., w.
						1,750	823.1	11.2	.....	56	7.45	s.	9.7	1,715	0	
12:40	964.7	23.8	44	sse.	5.4	1,504	847.7	13.7	0.86	56	8.78	s.	13.0	1,474	0	
						1,250	873.2	15.9	.....	56	10.12	s.	12.0	1,225	0	
						1,000	899.2	18.0	.....	55	11.35	sse.	11.0	980	0	
12:54	964.6	24.4	41	sse.	5.8	760	925.0	20.1	1.18	55	12.94	sse.	10.0	745	0	
						750	926.0	20.2	.....	55	13.02	sse.	9.9	735	0	
						500	953.0	23.2	.....	46	13.08	s.	6.7	490	0	
1:04	964.5	24.4	43	s.	5.4	396	964.5	24.4	.....	43	13.15	s.	5.4	388	.....	5/10 Cl.St., w.; 5/10 A.Cu., w.

May 29, 1916.

A. M.																
10:55	962.1	21.8	64	nne.	5.8	396	962.1	21.8	.....	64	16.72	nne.	5.8	388	.....	Few Cl.St., sw.; few Cu., n.
						500	950.6	20.9	.....	64	15.82	nne.	6.9	490	0	
						750	923.8	18.7	.....	64	13.80	nne.	9.6	735	0	
11:04	962.1	21.6	62	n.	4.5	764	922.0	18.6	0.87	64	13.72	nne.	9.7	749	0	
						1,000	897.1	16.8	.....	64	12.24	nne.	10.1	980	110	
						1,250	871.1	14.9	.....	63	10.67	n.	10.4	1,225	210	
						1,500	845.8	13.0	.....	63	9.44	n.	10.8	1,470	300	Few Cu., nne.
11:35	962.3	21.9	65	nne.	4.0	1,541	841.7	12.7	0.76	63	9.25	n.	10.9	1,510	310	Altitude of Cu. base about 1,300 m.
						1,750	821.0	11.1	.....	63	8.32	n.	11.6	1,715	300	
						2,000	796.4	9.3	.....	62	7.27	n.	12.5	1,960	.....	
P. M.																
1:21	962.5	23.5	60	nne.	3.6	2,105	786.8	8.5	0.71	62	6.88	n.	12.9	2,063	.....	
						2,000	796.4	9.2	.....	64	7.45	n.	12.2	1,960	0	
						1,750	821.0	10.9	.....	68	8.87	nne.	10.5	1,715	0	Altitude of Cu. base about 1,500 m.
						1,500	845.8	12.6	.....	72	10.50	nne.	8.8	1,470	0	
1:41	962.5	23.8	58	nne.	3.6	1,411	855.0	13.2	0.86	73	11.07	nne.	8.2	1,383	0	2/10 Cu., nne.
						1,250	871.1	14.6	.....	71	11.80	nne.	8.1	1,225	0	
						1,000	897.1	16.7	.....	68	12.93	nne.	7.9	980	0	
1:57	962.5	24.0	59	nne.	3.6	781	920.7	18.6	1.35	66	14.14	nne.	7.7	766	0	
						750	923.8	19.0	.....	65	14.28	nne.	7.4	735	0	
						500	950.9	22.4	.....	59	15.98	nne.	5.4	490	0	
2:11	962.5	23.8	56	nne.	4.5	396	962.5	23.8	.....	56	16.51	nne.	4.5	388	.....	3/10 Cu., nne.

May 30, 1916.

P. M.																
12:34	966.8	25.3	48	s.	4.5	396	966.8	25.3	.....	48	15.48	s.	4.5	388	.....	2/10 Cu., s.
						500	955.2	24.5	.....	48	14.76	s.	5.3	490	0	
						750	928.3	22.7	.....	47	12.97	sse.	7.1	735	0	
1:07	966.5	25.0	51	sse.	4.0	768	926.2	22.6	0.73	47	12.89	sse.	7.2	753	0	1/10 Cu., s.
						1,000	901.7	20.0	.....	49	11.46	sse.	8.0	980	0	
2:01	966.2	25.6	51	s.	4.5	1,151	885.9	18.3	1.12	51	10.73	sse.	8.6	1,128	0	
						1,250	875.6	17.5	.....	52	10.40	sse.	8.7	1,225	0	
						1,500	849.9	15.3	.....	54	9.39	s.	8.9	1,470	0	
2:34	965.9	25.7	46	s.	7.6	1,677	832.2	13.8	0.86	55	8.65	s.	9.0	1,644	0	
						1,750	824.9	13.4	.....	54	8.30	s.	8.8	1,715	70	
						2,000	800.7	11.6	.....	50	6.83	s.	8.1	1,960	270	Altitude of Cu. base about 2,150 m.
						2,250	777.1	10.7	.....	45	5.79	s.	7.5	2,205	.....	
						2,500	753.7	8.9	.....	41	4.67	s.	6.8	2,450	.....	
3:18	965.5	25.7	46	s.	6.3	2,523	751.8	8.8	0.58	41	4.65	s.	6.7	2,472	.....	
						2,500	753.7	8.9	.....	41	4.67	s.	6.7	2,450	.....	
						2,250	777.1	10.3	.....	44	5.51	s.	7.0	2,205	.....	
						2,000	800.7	11.7	.....	48	6.60	s.	7.4	1,960	.....	
						1,750	824.9	13.1	.....	52	7.84	s.	7.8	1,715	.....	
						1,500	849.3	14.5	.....	56	9.25	s.	8.2	1,470	.....	
3:38	965.3	25.6	45	s.	5.8	1,455	854.0	14.8	1.04	57	9.59	s.	8.3	1,426	.....	
						1,250	874.6	16.9	.....	55	10.59	s.	10.4	1,225	0	
3:55	965.2	25.6	50	s.	5.8	1,175	882.2	17.7	0.94	54	10.94	s.	11.2	1,152	0	
						1,000	900.2	19.3	.....	50	11.20	s.	10.7	980	0	
4:05	965.2	25.6	45	s.	5.4	781	923.6	21.4	1.06	45	11.47	s.	10.0	766	0	
						750	926.8	21.7	.....	45	11.68	s.	9.6	735	0	
						500	953.8	24.4	.....	46	14.06	s.	6.3	490	0	
4:10	965.2	25.5	47	s.	4.9	396	965.2	25.5	.....	47	15.34	s.	4.9	388	.....	1/10 Cu., s.

TABLE 3.—*Free-air data from kite flights at Drexel Aerological Station, May, 1916*—Continued.

May 31, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
1:24	959.3	22.2	64	s.	8.9	396	959.3	22.2	.....	64	17.13	s.	8.9	388	.....	8/10 St.Cu., s.
						500	947.5	21.5	.....	66	16.93	s.	9.6	490	0	
						750	920.5	19.9	.....	69	16.04	s.	11.4	735	0	
1:32	959.2	22.2	64	s.	8.0	804	915.0	19.5	0.66	70	15.87	s.	11.8	788	0	
						1,000	894.0	17.9	.....	73	14.97	s.	19.1	980	0	
1:43	959.1	21.8	68	s.	9.8	1,090	885.0	17.1	0.84	74	14.43	s.	22.5	1,069	0	10/10 St.Cu., s.
						1,250	868.2	15.9	.....	78	14.09	s.	24.6	1,225	0	
1:54	959.0	22.0	68	s.	8.5	1,353	857.9	15.2	0.72	80	13.82	s.	26.0	1,326	0	
						1,500	843.0	14.2	.....	79	12.79	s.	25.0	1,470	230	
						1,750	818.2	12.4	.....	77	11.09	s.	23.2	1,715	.....	Altitude of St.Cu. base about 1,800 m.
2:26	958.7	22.3	66	s.	8.5	2,075	787.1	10.2	0.72	75	9.34	s.	21.0	2,033	.....	
						2,000	793.8	10.8	.....	75	9.71	s.	20.9	1,960	.....	
						1,750	817.1	12.6	.....	73	10.65	s.	20.4	1,715	650	10/10 St.Cu., s.
3:08	958.3	22.8	67	s.	11.6	1,542	838.5	14.2	0.59	72	11.66	s.	20.0	1,511	500	
						1,500	841.8	14.4	.....	72	11.81	s.	20.0	1,470	470	
						1,250	868.0	15.9	.....	72	13.01	s.	20.3	1,225	130	
3:25	958.1	23.8	66	s.	11.6	1,167	876.2	16.4	0.60	72	13.43	s.	20.4	1,144	0	
						1,000	894.0	17.4	.....	70	13.91	s.	19.8	980	0	
3:35	958.0	23.5	65	sse.	9.8	782	916.3	18.7	1.17	67	14.45	sse.	19.0	767	0	
						750	919.7	19.1	.....	67	14.81	sse.	18.2	735	0	
						500	946.1	22.0	.....	66	17.45	sse.	11.6	490	0	
3:41	957.9	23.2	65	sse.	8.9	396	957.9	23.2	.....	65	18.49	sse.	8.9	388	.....	10/10 St.Cu., s.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916.*

June 1, 1916.

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
6:13	958.3	18.8	95	n.	4.0	396	958.3	18.8	.....	95	20.62	n.	4.0	388	.....	10/10 St., n.
						500	945.8	18.3	.....	95	19.98	n.	6.3	490	.....	Misting.
						750	920.0	17.0	.....	94	18.22	n.	11.7	735	0	Altitude of St. base about 750 m.
6:22	958.4	18.8	96	n.	4.5	817	912.4	16.6	0.52	94	17.76	n.	13.2	801	0	
						1,000	893.8	16.1	.....	95	17.38	nnw.	11.1	980	0	Mist ended 6:20 p. m.
7:07	959.1	18.2	90	n.	5.8	1,220	870.9	15.4	0.30	97	16.98	nw.	8.6	1,196	0	
						1,250	867.6	15.3	.....	96	16.68	nw.	8.9	1,225	0	
						1,500	842.7	14.6	.....	87	14.46	wnw.	11.8	1,470	0	
7:25	959.3	17.8	89	n.	6.3	1,742	818.8	13.9	0.29	78	12.39	wnw.	14.6	1,707	0	2/10 A.Cu., w.; 6/10 St.Cu., w.
						1,750	818.3	13.8	.....	78	12.31	wnw.	14.6	1,715	0	
						2,000	794.8	12.0	.....	88	12.35	wnw.	14.8	1,960	0	
7:41	959.5	17.6	89	n.	5.8	2,241	771.6	10.3	0.64	98	12.28	wnw.	14.9	2,198	0	7/10 St.Cu., w.; few Fr.St., n.
						2,000	794.8	11.6	.....	92	12.57	wnw.	14.4	1,960	0	
7:53	959.6	17.3	90	n.	5.8	1,775	815.5	12.9	0.22	86	12.80	wnw.	14.0	1,740	0	
						1,750	818.3	13.0	.....	86	12.88	wnw.	14.0	1,715	0	
						1,500	842.7	13.5	.....	91	14.08	nw.	13.6	1,490	0	
8:01	959.7	17.2	90	n.	6.7	1,371	855.6	13.8	0.12	93	14.68	nnw.	13.4	1,344	0	
						1,250	867.9	13.9	.....	94	14.93	nnw.	14.1	1,225	0	
						1,000	894.0	14.2	.....	96	15.54	n.	15.6	980	0	
						750	921.1	14.5	.....	99	16.34	n.	17.1	735	0	4/10 St.Cu., w.; 4/10 St.Cu., n.
8:24	960.1	17.3	89	n.	5.4	700	926.4	14.6	0.89	99	16.45	n.	17.4	686	0	
						500	949.0	16.4	.....	93	17.34	n.	8.9	490	0	
8:31	960.3	17.3	90	n.	4.5	396	960.3	17.3	.....	99	17.78	n.	4.5	388	.....	10/10 St.Cu., n.

June 2, 1916.

A. M.																
7:19	966.4	12.8	75	n.	4.0	396	966.4	12.8	.....	75	11.08	n.	4.0	388	.....	Cloudless.
						500	955.0	11.6	.....	76	10.38	n.	6.6	490	0	
						750	926.7	8.7	.....	80	9.00	n.	12.7	735	0	
7:27	966.5	12.7	75	n.	4.5	762	925.0	8.6	1.15	80	8.94	n.	13.0	747	0	
7:38	966.6	13.0	75	n.	4.0	938	905.7	9.3	−0.40	61	7.15	n.	17.7	920	0	
						1,000	898.8	9.1	.....	62	7.17	n.	17.8	980	0	
						1,250	872.2	8.2	.....	66	7.17	n.	18.3	1,225	0	
						1,500	846.0	7.2	.....	69	7.01	nnw.	18.8	1,470	0	
7:56	966.9	13.5	76	n.	4.0	1,605	835.7	6.8	0.37	70	6.92	nnw.	19.0	1,573	0	
						1,750	820.5	6.6	.....	66	6.44	nnw.	19.0	1,715	60	
						2,000	795.6	6.2	.....	58	5.50	nw.	19.0	1,960	170	
						2,250	771.8	5.9	.....	51	4.74	nw.	19.0	2,205	390	
8:24	966.7	14.2	70	nnw.	3.1	2,378	760.5	5.7	0.14	47	4.31	nw.	19.0	2,330	500	Cloudless.
						2,500	748.6	4.8	.....	47	4.04	nw.	18.6	2,450	610	
						2,750	726.1	2.9	.....	46	3.46	wnw.	17.9	2,694	830	
						3,000	703.8	1.0	.....	45	2.96	wnw.	17.1	2,939	1,020	Few Cu., nnw.
						3,250	681.9	−0.9	.....	44	2.49	w.	16.4	3,184	1,330	
9:24	966.7	15.0	69	n.	4.5	3,396	670.0	−2.0	0.62	43	2.22	w.	16.0	3,327	1,500	
						3,250	681.9	−1.3	.....	43	2.36	w.	16.6	3,184	1,230	
						3,000	703.8	−0.1	.....	44	2.67	wnw.	17.6	2,939	1,050	
						2,750	726.1	1.1	.....	44	2.91	wnw.	18.6	2,694	870	
10:15	967.0	15.6	72	n.	4.0	2,736	727.2	1.2	0.42	44	2.93	wnw.	18.7	2,661	860	3/10 Cu., nnw.
						2,500	748.6	2.2	.....	48	3.44	wnw.	18.4	2,450	730	
						2,250	771.8	3.2	.....	52	4.00	nw.	18.0	2,205	580	
						2,000	795.6	4.3	.....	57	4.74	nw.	17.7	1,960	430	
						1,750	821.1	5.3	.....	61	5.44	nnw.	17.3	1,715	150	
10:43	967.1	15.7	71	nnw.	4.9	1,688	827.3	5.6	−0.84	62	5.64	nnw.	17.2	1,654	80	6/10 Cu., nnw.
10:49	967.1	15.6	69	nnw.	5.8	1,557	840.7	4.5	0.48	93	7.83	nnw.	16.8	1,526	0	
						1,500	846.7	4.8	.....	92	7.91	nnw.	16.1	1,470	0	
						1,250	873.7	6.0	.....	89	8.32	nnw.	12.8	1,225	0	Altitude of Cu. base about 1,250 m.
10:59	967.2	16.2	72	n.	5.4	1,124	886.6	6.6	1.06	87	8.48	nnw.	11.2	1,102	0	
						1,000	900.2	7.9	.....	82	8.73	nnw.	11.5	980	0	8/10 Cu., nnw.
11:10	967.3	16.6	70	nnw.	6.3	756	926.8	10.5	1.58	71	9.02	nnw.	12.2	741	0	
						750	928.0	10.6	.....	71	9.07	nnw.	12.1	735	0	
						500	956.0	14.6	.....	67	11.14	nnw.	7.6	490	0	
11:15	967.4	16.2	65	nnw.	5.8	396	967.4	16.2	.....	65	11.97	nnw.	5.8	388	.....	9/10 Cu., nnw.

June 3, 1916.

A. M.																
7:02	967.9	12.7	79	sw.	4.9	396	967.9	12.7	.....	79	11.61	sw.	4.9	388	.....	Cloudless.
						500	955.7	12.4	.....	64	9.22	sw.	7.4	490	0	
7:08	967.9	12.8	79	sw.	4.9	594	945.3	12.1	0.30	50	7.06	sw.	9.7	582	0	
7:09	967.9	12.8	79	sw.	4.9	752	927.7	13.4	−0.82	52	7.99	sw.	9.0	737	0	
						1,000	901.0	12.7	.....	51	7.49	sw.	9.1	980	0	
						1,250	874.8	12.0	.....	50	7.02	wsw.	9.2	1,225	0	
8:15	967.8	16.2	70	sw.	4.9	1,338	865.8	11.7	0.29	50	6.88	wsw.	9.2	1,312	0	
						1,500	849.0	10.4	.....	49	6.18	wsw.	8.6	1,470	0	
						1,750	824.0	8.4	.....	48	5.29	w.	7.7	1,715	0	
						2,000	799.7	6.5	.....	46	4.45	w.	6.8	1,960	330	
10:05	967.1	19.3	62	sw.	4.9	2,080	791.6	5.9	0.78	45	4.18	w.	6.5	2,038	380	
						2,250	775.8	4.7	.....	43	3.67	w.	7.5	2,205	510	
						2,500	752.5	3.0	.....	40	3.03	w.	9.0	2,450	700	
						2,750	729.8	1.3	.....	37	2.48	wnw.	10.5	2,694	900	
						3,000	707.5	−0.5	.....	34	1.99	wnw.	11.9	2,939	1,090	
						3,250	685.7	−2.2	.....	31	1.58	wnw.	13.4	3,184	1,290	
						3,500	664.3	−4.0	.....	28	1.22	wnw.	14.9	3,429	1,480	
						3,750	643.1	−5.7	.....	25	0.94	nw.	16.4	3,673	1,670	
						4,000	622.2	−7.5	.....	22	0.71	nw.	17.9	3,918	.....	Cloudless.
11:05	966.5	22.0	54	sw.	6.3	4,072	616.2	−8.1	0.62	21	0.64	nw.	18.4	3,988	.....	
						4,000	622.2	−7.7	.....	23	0.73	nw.	18.2	3,918	.....	
						3,750	643.1	−6.4	.....	30	1.07	nw.	17.7	3,673	.....	
						3,500	664.3	−5.0	.....	36	1.44	nw.	17.1	3,429	.....	
						3,250	685.7	−3.7	.....	43	1.93	nw.	16.6	3,184	.....	Ci. forming.
11:45	966.0	23.0	46	ssw.	5.4	3,173	691.1	−3.3	0.95	45	2.09	nw.	16.4	3,109	730	

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 3, 1916—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
						3,000	707.5	−1.7	.....	44	2.33	nw.	15.8	2,939	490	
						2,750	729.8	0.6	.....	42	2.68	wnw.	15.0	2,694	240	
						2,500	752.5	3.0	.....	40	3.03	w.	14.2	2,450	180	
						2,250	775.8	5.4	.....	38	3.41	w.	13.4	2,205	110	
						2,000	799.7	7.8	.....	36	3.81	wsw.	12.5	1,960	50	
P. M.																
12:08	965.8	23.3	41	wsw.	4.0	1,925	806.2	8.5	0.74	35	3.88	wsw.	12.3	1,887	30	1/10 Ci St., w.; 1/10 Cu., wsw.
						1,750	824.0	9.8	.....	39	4.73	wsw.	10.6	1,715	0	
						1,500	849.0	11.6	.....	46	6.28	wsw.	8.2	1,470	0	
						1,250	874.1	13.5	.....	52	8.04	wsw.	5.9	1,225	0	
12:15	965.7	23.3	43	w.	3.6	1,233	876.0	13.6	1.32	52	8.10	wsw.	5.7	1,209	0	
						1,000	900.0	16.7	.....	45	8.55	wsw.	5.7	980	0	
						750	927.0	20.0	.....	37	8.65	sw.	5.6	735	0	
12:28	965.5	23.5	42	wsw.	4.0	726	929.5	20.3	1.03	36	8.58	sw.	5.6	712	0	
						500	953.7	22.6	.....	41	11.25	sw.	4.5	490	0	
12:38	965.4	23.7	44	sw.	4.0	396	965.4	23.7	.....	44	12.90	sw.	4.0	388	.....	1/10 Ci. St., w.; 1/10 Cu., wsw.

June 5, 1916.

A. M.																
9:32	962.8	17.6	67	se.	7.6	396	962.8	17.6	.....	67	13.49	se.	7.6	388	.....	6/10 Ci., w.; 4/10 A. St., w.
						500	951.2	16.7	.....	66	12.55	se.	10.1	490	0	
						750	923.6	14.4	.....	64	10.50	sse.	16.1	735	0	
9:41	962.8	17.8	66	se.	8.0	798	918.2	14.0	0.90	64	10.23	sse.	17.3	782	0	
						1,000	896.2	13.5	.....	64	9.90	sse.	15.0	980	90	
9:53	962.8	18.0	65	se.	5.8	1,208	874.8	13.0	0.24	65	9.74	se.	12.6	1,184	170	
						1,250	870.3	12.8	.....	64	9.46	se.	12.3	1,225	220	
						1,500	845.0	11.3	.....	55	7.36	ese.	10.7	1,470	490	6/10 Ci., w.; 4/10 A. St., w.
						1,750	820.2	9.8	.....	47	5.70	ese.	9.0	1,715	560	
						2,000	795.7	8.3	.....	38	4.16	e.	7.4	1,960	850	5/10 Ci., w.; 5/10 A. St., w.
11:03	962.5	19.4	60	se.	7.2	2,041	791.4	8.1	0.59	37	4.00	e.	7.1	2,000	930	22°-halo.
						2,250	771.6	6.7	.....	38	3.73	e.	7.0	2,205	1,250	4/10 Ci., w.; 6/10 A. St., w.
						2,500	748.0	5.0	.....	39	3.40	e.	6.8	2,450	.....	
						2,750	725.2	3.2	.....	40	3.08	ene.	6.6	2,694	.....	
						3,000	702.9	1.5	.....	41	2.79	ene.	6.4	2,939	.....	
P. M.																
1:02	961.8	20.9	54	ese.	9.4	3,167	688.6	0.4	0.62	42	2.64	ene.	6.3	3,103	.....	10/10 Ci., w.
						3,000	702.9	1.3	.....	41	2.75	ene.	6.5	2,939	1,130	
						2,750	725.2	2.7	.....	40	2.97	e.	6.9	2,694	1,120	
						2,500	748.0	4.1	.....	40	3.28	e.	7.2	2,450	910	
						2,250	771.1	5.5	.....	39	3.52	ese.	7.6	2,205	800	
1:46	961.3	21.6	53	se.	6.7	2,098	784.9	6.4	0.62	38	3.65	ese.	7.8	2,056	615	
						2,000	794.6	7.0	.....	42	4.21	ese.	7.9	1,960	560	
						1,750	818.8	8.6	.....	52	5.81	ese.	8.2	1,715	400	
						1,500	843.8	10.1	.....	63	7.79	se.	8.5	1,470	250	
						1,250	869.7	11.7	.....	73	10.04	se.	8.8	1,225	180	
2:14	960.9	21.4	54	se.	7.6	1,212	873.1	11.9	1.02	75	10.45	se.	8.8	1,188	170	
						1,000	895.8	14.1	.....	68	10.94	se.	9.5	980	90	
2:26	960.7	21.2	54	se.	5.4	751	921.7	16.6	1.35	60	11.33	se.	10.4	736	0	
						500	949.4	20.0	.....	56	13.09	se.	7.5	490	0	Solar halo continued.
2:31	960.6	21.4	54	se.	6.3	396	960.6	21.4	.....	54	13.76	se.	6.3	388	.....	10/10 Ci., w.

June 6, 1916.

A. M.																
9:35	963.3	15.4	63	nnw.	5.8	396	963.3	15.4	.....	63	11.02	nnw.	5.8	388	.....	2/10 Ci., s.; 6/10 St.Cu., nnw.
						500	951.5	14.0	.....	66	10.55	nnw.	7.9	490	0	
9:44	963.4	15.3	62	n.	6.3	750	923.6	10.7	1.33	72	9.27	n.	12.8	735	0	
9:52	963.4	15.9	60	n.	8.0	1,000	896.5	8.8	.....	67	7.59	nnw.	14.8	980	0	
						1,216	873.2	7.1	0.77	62	6.26	nnw.	16.5	1,192	0	
						1,250	870.0	7.0	.....	63	6.31	nnw.	16.3	1,225	20	
						1,500	843.7	6.5	.....	68	6.58	n.	14.8	1,470	130	
10:12	963.6	15.2	58	n.	6.3	1,657	827.6	6.2	0.20	72	6.83	n.	13.8	1,624	270	2/10 Ci., s.; 3/10 St.Cu., nnw.
						1,750	818.1	5.6	.....	69	6.28	n.	14.0	1,715	400	
						2,000	793.1	4.0	.....	62	5.04	nnw.	14.4	1,960	730	
						2,250	769.2	2.5	.....	56	4.09	nnw.	14.8	2,205	910	
						2,500	746.1	1.0	.....	49	3.22	nnw.	15.2	2,450	1,050	4/10 Ci., s.
						2,750	723.9	−0.6	.....	42	2.44	nw.	15.7	2,694	1,200	
11:18	963.9	16.4	51	nnw.	5.8	2,951	705.5	−1.8	0.62	36	1.89	nw.	16.1	2,891	1,320	3/10 Ci., s.
						3,000	701.9	−2.0	.....	35	1.81	nw.	16.3	2,939	1,350	
						3,250	680.0	−3.2	.....	29	1.36	nw.	17.2	3,184	1,510	
						3,500	658.5	−4.5	.....	24	1.01	nw.	18.1	3,429	1,670	
						3,750	638.0	−5.7	.....	18	0.68	nw.	19.0	3,673	.....	
P. M.																
12:55	964.2	17.7	49	nnw.	6.7	3,952	621.9	−6.7	0.47	14	0.49	nw.	19.7	3,871	.....	1/10 Ci., s.; 1/10 Cu., nnw.
						3,750	638.0	−5.8	.....	15	0.56	nw.	18.4	3,673	.....	
						3,500	658.5	−4.7	.....	17	0.70	nw.	16.7	3,429	1,540	
						3,250	680.0	−3.5	.....	18	0.82	nw.	15.1	3,184	1,290	
1:40	964.4	18.2	46	nnw.	4.9	3,000	701.9	−2.4	.....	20	1.00	nw.	13.4	2,939	1,080	
						2,973	704.0	−2.3	0.62	20	1.01	nw.	13.2	2,913	1,060	
						2,750	723.9	−0.9	.....	21	1.19	nw.	13.7	2,694	920	
						2,500	746.7	0.6	.....	22	1.40	nnw.	14.2	2,450	770	
						2,250	770.6	2.2	.....	23	1.65	nnw.	14.8	2,205	690	
2:06	964.5	18.6	47	nnw.	5.4	2,136	781.7	2.9	0.33	24	1.81	nnw.	15.0	2,093	620	
						2,000	795.0	3.4	.....	38	2.96	nnw.	14.9	1,960	500	Alt. of Cu. base about 1,900 m.
						1,750	819.9	4.2	.....	63	5.20	nnw.	14.6	1,715	280	
2:28	964.4	18.5	46	nnw.	6.3	1,624	832.6	4.6	1.02	76	6.44	nnw.	14.5	1,592	170	
						1,500	845.3	5.9	.....	72	6.69	nnw.	14.1	1,470	110	
						1,250	871.7	8.4	.....	64	7.05	nnw.	13.3	1,225	0	
						1,000	898.2	10.9	.....	57	7.43	nnw.	12.5	980	0	
2:49	964.3	18.4	45	n.	5.4	778	921.9	13.2	1.39	50	7.58	nnw.	11.8	763	0	
						750	925.0	13.6	.....	50	7.79	nnw.	11.4	735	0	
						500	952.6	17.1	.....	47	9.16	n.	7.8	490	0	
2:55	964.2	18.5	46	n.	6.3	396	964.2	18.5	.....	46	9.80	n.	6.3	388	.....	2/10 Ci., s.; 1/10 Cu., nnw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 7, 1916.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	Δt / 100 m.	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^6 ergs.*	*volts.*	
7:25	966.7	12.4	62	nw.	4.9	396	966.7	12.4	.....	62	8.93	nw.	4.9	388	.....	2/10 Ci., nw.; 1/10 Ci.St., nw.
						500	955.0	11.6	.....	56	7.65	nw.	9.9	490	0	
7:29	966.7	12.6	64	nw.	5.8	636	939.4	10.6	0.75	49	6.26	nw.	16.5	623	0	
						750	927.2	12.2	.....	44	6.25	nw.	16.0	735	0	
7:34	966.7	12.6	63	nw.	6.3	761	925.4	12.3	−1.36	43	6.15	nw.	16.0	746	0	
						1,000	900.0	10.1	.....	47	5.81	nw.	16.0	980	0	
						1,250	873.0	7.8	.....	52	5.50	nw.	16.0	1,223	10	
						1,500	846.3	5.6	.....	56	5.10	nw.	16.0	1,470	460	
7:35	966.5	14.0	60	nw.	5.4	1,578	838.4	4.9	0.91	57	4.94	nw.	16.0	1,547	565	2/10 Ci., nw.
						1,750	821.0	3.4	.....	59	4.60	nw.	16.0	1,715	740	
						2,000	795.8	1.3	.....	63	4.16	nw.	15.9	1,960	990	
						2,250	771.4	−0.8	.....	65	3.71	nw.	15.9	2,205	1,190	
						2,500	747.5	−2.9	.....	68	3.26	nw.	15.8	2,450	1,370	
8:25	966.5	15.2	55	nw.	5.8	2,619	736.9	−3.9	0.85	69	3.04	nw.	15.8	2,566	1,450	
						2,750	724.7	−4.8	.....	68	2.77	nw.	16.1	2,694	1,730	1/10 Ci., nw.
						3,000	702.0	−6.5	.....	66	2.33	nw.	16.6	2,939	2,200	
						3,250	680.0	−8.3	.....	64	1.93	nw.	17.2	3,184	2,470	
						3,500	658.0	−10.0	.....	62	1.61	nw.	17.7	3,429	2,730	
9:17	966.4	16.5	48	nw.	6.3	3,666	643.6	−11.2	0.62	61	1.42	nw.	18.0	3,591	2,900	
						3,500	658.0	−10.3	.....	62	1.57	nw.	18.0	3,429	2,690	
						3,250	680.0	−8.9	.....	63	1.80	nw.	18.0	3,184	2,370	
						3,000	702.0	−7.5	.....	65	2.10	nw.	18.1	2,939	2,500	
						2,750	724.7	−6.1	.....	66	2.41	nw.	18.1	2,694	1,730	
10:07	966.1	17.4	44	nw.	6.7	2,578	740.0	−5.2	0.96	67	2.64	nw.	18.1	2,526	1,500	1/10 Cu., nw.
						2,500	747.5	−4.5	.....	67	2.81	nw.	18.0	2,450	1,360	
						2,250	771.4	−2.1	.....	67	3.44	nw.	17.6	2,205	910	
						2,000	795.8	0.3	.....	67	4.18	nw.	17.2	1,960	590	
						1,750	821.0	2.7	.....	67	4.97	nw.	16.8	1,715	370	
10:40	965.7	18.2	43	nw.	7.6	1,512	845.1	5.0	1.20	67	5.84	nw.	16.4	1,482	170	
						1,500	846.3	5.1	.....	67	5.89	nw.	16.4	1,470	170	
						1,250	872.7	8.2	.....	58	6.30	nw.	15.6	1,225	0	
						1,000	899.0	11.2	.....	49	6.52	nw.	14.9	980	0	
11:11	965.4	18.4	35	nw.	8.5	788	921.9	13.7	1.40	42	6.59	nw.	14.3	773	0	
						750	926.0	14.2	.....	42	6.80	nw.	13.7	735	0	
						500	953.8	17.7	.....	39	7.90	nw.	9.4	490	0	
11:17	965.4	19.2	38	nw.	7.6	396	965.4	19.2	.....	38	8.46	nw.	7.6	388	.....	4/10 Cu., nw.

June 8, 1916.

A. M.																
7:26	962.0	12.6	73	nw.	9.4	396	962.0	12.6	.....	73	10.65	nw.	9.4	388	.....	2/10 Ci., nnw.; 2/10 Ci.St., nnw.
						500	950.0	11.7	.....	75	10.31	nw.	12.1	490	0	
						750	921.6	9.6	.....	81	9.68	nnw.	18.6	735	0	
7:34	961.9	13.4	71	nw.	9.8	787	917.9	9.3	0.84	82	9.61	nnw.	19.6	772	0	
						1,000	894.2	7.9	.....	81	8.63	nnw.	20.1	980	160	
						1,250	868.0	6.4	.....	80	7.69	nnw.	20.6	1,225	.....	
						1,500	842.2	4.8	.....	80	6.88	nnw.	21.2	1,470	.....	
7:59	961.8	14.2	66	nw.	10.3	1,589	832.8	4.2	0.70	80	6.60	nnw.	21.4	1,557	.....	1/10 Ci., nnw.; 2/10 Ci. St., nnw.; few Cu., nw.
						1,500	842.2	4.7	.....	70	6.75	nnw.	21.0	1,470	.....	
						1,250	868.0	6.7	.....	78	7.65	nnw.	19.8	1,225	280	
						1,000	894.2	8.7	.....	76	8.55	nw.	18.6	980	0	
8:53	961.8	15.4	63	nw.	9.8	757	921.4	10.6	1.39	75	9.58	nw.	17.5	742	0	3/10 Ci.St., nnw.; 2/10 St.Cu., nw.
						750	921.6	10.7	.....	73	9.65	nw.	17.4	735	0	
						500	950.0	14.2	.....	65	10.52	nw.	10.7	490	0	
9:01	961.8	15.6	61	nw.	8.0	396	961.8	15.6	.....	61	10.81	nw.	8.0	388	.....	4/10 Ci.St., nnw.; 2/10 Cu., nw.

June 9, 1916.

A. M.																
7:16	967.7	12.2	80	wnw.	4.5	396	967.7	12.2	.....	80	11.37	wnw.	4.5	388	.....	Cloudless.
7:20	967.7	12.3	80	wnw.	4.5	463	960.0	10.5	2.54	84	10.67	nw.	8.5	454	0	
						500	956.2	10.9	.....	83	10.82	nw.	8.5	490	0	
7:22	967.7	12.4	79	wnw.	4.5	715	931.6	12.9	−0.95	71	10.56	nw.	8.5	701	30	
						750	929.0	12.7	.....	71	10.43	nw.	8.6	735	60	
						1,000	901.5	11.1	.....	70	9.25	nw.	9.6	980	240	
						1,250	875.0	9.6	.....	68	8.13	nnw.	10.6	1,225	350	
						1,500	848.7	8.0	.....	67	7.19	nnw.	11.6	1,470	380	
8:10	967.8	15.1	72	nw.	4.0	1,528	845.4	7.8	0.63	67	7.09	nnw.	11.7	1,498	380	
						1,750	822.7	5.7	.....	68	6.23	nnw.	10.9	1,715	420	
						2,000	797.3	3.3	.....	69	5.34	nnw.	10.1	1,960	460	
8:46	967.7	16.8	68	nw.	3.6	2,087	780.4	2.5	0.95	69	5.04	nnw.	9.8	2,045	500	Cloudless.
						2,250	773.0	2.4	.....	57	4.14	nnw.	11.8	2,205	610	
						2,500	749.8	2.2	.....	38	2.72	nnw.	14.8	2,450	780	
						2,750	727.2	2.0	.....	20	1.41	nnw.	17.8	2,694	950	
9:15	967.6	18.4	61	nnw.	3.6	2,859	717.7	1.9	0.08	12	0.84	nnw.	19.1	2,801	1,000	Few Cu., nnw.
						3,000	705.3	0.9	.....	12	0.78	nnw.	19.3	2,939	1,060	
						3,250	684.2	−0.9	.....	13	0.74	nnw.	19.6	3,184	1,210	
						3,500	663.2	−2.7	.....	13	0.63	nnw.	20.0	3,429	.....	
						3,750	643.0	−4.5	.....	13	0.54	nnw.	20.4	3,673	.....	
						4,000	622.8	−6.3	.....	14	0.50	nnw.	20.7	3,918	.....	
10:01	967.6	19.6	58	nnw.	5.8	4,230	604.2	−8.0	0.72	14	0.43	nnw.	21.0	4,143	.....	
						4,000	622.8	−6.4	.....	14	0.50	nnw.	20.5	3,918	1,880	3/10 Cu., nnw.
						3,750	643.0	−4.6	.....	14	0.58	nnw.	20.0	3,673	1,490	
						3,500	663.5	−2.8	.....	14	0.68	nnw.	19.4	3,429	1,230	
						3,250	684.8	−1.0	.....	13	0.73	nnw.	18.8	3,184	1,040	
						3,000	706.2	0.8	.....	13	0.84	nnw.	18.3	2,939	850	
11:00	967.2	20.2	48	nnw.	4.9	2,758	727.1	2.5	0.12	13	0.95	nnw.	17.8	2,702	660	
						2,750	728.1	2.5	.....	13	0.95	nnw.	17.7	2,694	650	
						2,500	750.5	2.8	.....	12	0.90	nnw.	13.5	2,450	520	
11:08	967.2	20.3	50	nw.	4.0	2,414	758.7	2.9	0.62	12	0.90	nnw.	12.1	2,366	480	
						2,250	773.7	3.9	.....	20	1.62	nnw.	11.8	2,205	390	
						2,000	797.3	5.4	.....	32	2.87	nnw.	11.3	1,960	290	

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 9, 1916—Continued.

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
						1,750	822.1	7.0	.....	45	4.51	nnw.	10.8	1,715	190	
						1,500	847.7	8.6	.....	58	6.48	nnw.	10.3	1,470	90	
						1,250	874.0	10.1	.....	70	8.65	nnw.	9.8	1,225	0	
11:35	967.0	20.6	49	nw.	4.0	1,235	875.9	10.2	1.05	71	8.84	nnw.	9.8	1,211	0	3/10 Cu., nnw.
						1,000	901.0	12.7	.....	63	9.25	nnw.	8.6	980	0	
						750	928.0	15.3	.....	55	9.56	nw.	7.3	735	0	
11:49	967.0	20.6	47	nw.	3.6	571	947.4	17.2	2.40	49	9.61	nw.	6.4	560	0	
						500	951.0	18.9	.....	49	10.70	nw.	5.1	490	0	
11:58	966.9	21.4	50	nw.	3.1	396	966.9	21.4	.....	50	12.74	nw.	3.1	388	.....	1/10 Cu., nnw.

June 10, 1916 (No. 1).

A. M.																
10:53	963.9	18.8	63	sse.	4.0	396	963.9	18.8	.....	63	13.67	sse.	4.0	388	.....	5/10 A.St., sw.; 5/10 St.Cu., sw.
						500	951.5	18.3	.....	58	12.20	sse.	6.2	490	0	
						750	924.5	17.3	.....	48	9.48	sse.	11.4	735	0	
11:03	963.8	18.6	61	sse.	4.0	830	916.0	16.9	0.44	44	8.47	sse.	13.1	814	0	
						1,000	897.7	15.5	.....	48	8.45	sse.	12.2	980	0	
11:10	963.8	18.8	60	sse.	4.5	1,207	876.2	13.9	0.80	53	8.42	sse.	11.0	1,183	0	
						1,250	872.0	13.9	.....	52	8.26	sse.	10.4	1,225	0	
11:25	963.8	18.8	61	sse.	3.1	1,357	860.9	13.8	0.07	50	7.89	sse.	9.0	1,330	0	Light rain from 11:20 to 11:35 p. m.
						1,250	872.0	13.9	.....	54	8.58	sse.	11.1	1,225	0	
11:32	963.8	18.9	61	sse.	3.1	1,207	876.2	13.0	0.77	56	8.89	sse.	12.0	1,183	0	
						1,000	897.7	15.5	.....	50	8.80	sse.	11.9	980	0	
11:43	963.8	18.8	64	sse.	3.6	830	916.0	16.8	0.32	45	8.61	sse.	11.8	814	0	
						750	924.5	17.1	.....	49	9.56	sse.	10.4	735	0	
						500	951.5	17.9	.....	62	12.72	sse.	5.9	490	0	
11:49	963.8	18.2	67	sse.	4.0	396	963.8	18.2	.....	67	14.00	sse.	4.0	388	.....	2/10 A.St., sw.; 8/10 St.Cu., sw.

June 10, 1916 (No. 2).

P. M.																
3:07	964.2	19.5	68	ese.	4.0	396	964.2	19.5	.....	68	15.42	ese.	4.0	388	.....	1/10 A.St., w.; 9/10 St.Cu., w.
						500	952.5	19.2	.....	66	14.68	ese.	5.4	490	0	
						750	925.0	18.4	.....	63	13.33	se.	8.8	735	0	
3:15	964.2	19.6	68	ese.	2.7	794	920.6	18.3	0.30	62	13.04	se.	9.4	769	0	
						1,000	898.0	16.8	.....	66	12.63	se.	8.7	980	0	7/10 A.Cu., w.; few St.Cu., sw.
						1,250	872.3	14.9	.....	70	11.86	sse.	7.9	1,225	0	
4:52	963.9	21.8	61	ese.	4.9	1,485	848.6	13.2	0.74	74	11.23	sse.	7.2	1,456	280	8/10 A.Cu., wnw.
						1,500	847.0	13.1	.....	74	11.16	sse.	7.2	1,470	310	
						1,750	822.3	11.3	.....	78	10.44	sse.	8.0	1,715	.....	
						2,000	798.0	9.5	.....	83	9.85	sse.	8.8	1,960	.....	
5:04	963.8	22.5	60	ese.	4.5	2,227	776.5	7.9	0.74	87	9.27	sse.	9.5	2,182	.....	
						2,000	798.0	9.6	.....	81	9.68	sse.	9.6	1,960	.....	
						1,750	822.3	11.6	.....	74	10.11	sse.	9.7	1,715	.....	
						1,500	847.0	13.5	.....	68	10.52	sse.	9.8	1,470	.....	
5:20	963.8	22.2	60	ese.	4.0	1,485	848.6	13.6	0.63	68	10.59	sse.	9.8	1,456	.....	7/10 A.Cu., nw.; 2/10 St.Cu., sw.
						1,250	872.3	15.1	.....	67	11.50	sse.	9.1	1,225	60	
						1,000	898.0	16.7	.....	66	13.55	se.	8.3	980	0	
5:39	963.8	22.0	61	ese.	4.0	791	920.6	18.0	0.96	65	13.42	se.	7.7	776	0	
						750	924.6	18.4	.....	65	13.75	se.	7.3	735	0	
						500	952.0	20.8	.....	63	15.48	ese.	5.0	490	0	
5:44	963.8	21.8	62	ese.	4.0	396	963.8	21.8	.....	62	16.19	ese.	4.0	388	.....	6/10 A.Cu., wnw.; 2/10 St.Cu., sw.

June 12, 1916.

P. M.																
1:01	974.0	24.4	51	sse.	3.6	396	974.0	24.4	.....	51	15.59	sse.	3.6	388	.....	Few Cl., wsw.; 7/10 Cu., sse.
						500	962.1	23.2	.....	53	15.07	sse.	4.5	490	0	
						750	934.7	20.4	.....	58	13.90	sse.	6.5	735	0	
1:41	973.5	24.4	52	s.	3.6	915	916.9	18.6	1.12	61	13.07	sse.	7.9	897	0	9/10 Cu., s.
						1,000	907.3	17.8	.....	63	12.84	sse.	7.9	980	0	
						1,250	880.8	15.4	.....	68	11.90	sse.	8.0	1,225	0	
						1,500	855.0	12.9	.....	73	10.86	sse.	8.2	1,470	0	
2:55	972.7	25.5	50	s.	5.4	1,587	846.8	12.1	0.97	75	10.59	sse.	8.2	1,555	0	3/10 Cl.St., wsw.; 2/10 Cu., s.
						1,750	830.0	10.9	.....	76	9.91	sse.	8.0	1,715	0	
						2,000	805.5	9.1	.....	78	9.02	sse.	7.7	1,960	150	
						2,250	781.8	7.2	.....	80	8.13	s.	7.4	2,205	.....	
						2,500	758.0	5.4	.....	82	7.36	s.	7.1	2,450	.....	
3:26	972.2	25.4	50	s.	4.9	2,546	754.0	5.1	0.74	82	7.21	s.	7.0	2,495	.....	
						2,500	758.0	5.4	.....	82	7.36	s.	7.2	2,450	.....	
						2,250	781.8	7.2	.....	82	8.39	s.	8.2	2,205	0	
						2,000	805.5	9.1	.....	81	9.36	sse.	9.3	1,960	0	
						1,750	829.4	11.0	.....	81	10.64	sse.	10.3	1,715	0	
3:50	971.8	25.5	49	sse.	5.8	1,594	845.1	12.1	1.08	81	11.44	sse.	11.0	1,553	0	
						1,500	854.0	13.1	.....	78	11.76	sse.	11.1	1,470	0	2/10 Ci., wsw.; few Cu., s.
						1,250	879.4	15.8	.....	69	12.39	sse.	11.3	1,225	0	
						1,000	905.7	18.5	.....	60	12.78	sse.	11.5	980	0	
4:20	971.5	25.4	48	sse.	5.4	800	927.4	20.7	1.11	53	12.94	sse.	11.6	784	0	
						750	932.7	21.3	.....	53	13.42	sse.	10.9	735	0	
						500	960.0	24.0	.....	51	15.22	sse.	7.7	490	0	
4:29	971.4	25.2	50	sse.	0.3	396	971.4	25.2	.....	50	16.03	sse.	0.3	388	.....	1/10 Ci., wsw.; few A.Cu., sw.; few Cu., s.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 13, 1916.

Surface.						At different heights above sea.										
				Wind.						Humidity.		Wind.		Potential.		
Time.	Pressure.	Temperature.	Relative humidity.	Dir.	Vel.	Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\text{ m.}}$	Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	Remarks.
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
1:49	970.0	22.3	68	nnw.	4.5	396	970.0	22.3	.....	68	18.31	nnw.	4.5	388	.....	3/10 Ci., w.; 3/10 Cu., nw.
						500	958.0	20.8	.....	71	17.44	nnw.	5.0	490	0	
1:58	969.9	22.1	70	nw.	4.5	703	936.0	17.8	1.47	78	15.90	nw.	6.0	689	10	
						750	931.0	17.4	.....	79	15.70	nw.	6.2	735	10	
						1,000	904.0	15.4	.....	86	15.05	wnw.	7.0	980	80	
						1,250	877.8	13.4	.....	94	14.45	wnw.	7.9	1,225	140	
3:49	969.7	22.4	68	nw.	3.1	1,289	873.7	13.1	0.80	95	14.33	wnw.	8.0	1,264	150	
3:51	969.7	22.4	68	nw.	3.1	1,452	856.8	14.4	−0.80	59	9.68	wnw.	9.5	1,423	190	
						1,500	852.0	14.1	.....	59	9.49	wnw.	9.9	1,470	200	
						1,750	827.0	12.7	.....	59	8.67	wnw.	11.8	1,715	200	1/10 Ci. St., w.; 7/10 St.Cu., nw.
						2,000	802.7	11.3	.....	59	7.90	wnw.	13.7	1,960	.....	
						2,250	779.0	9.8	.....	60	7.37	wnw.	15.7	2,205	.....	
						2,500	756.0	8.3	.....	60	6.57	wnw.	17.7	2,450	.....	Altitude of St.Cu. base about 2,500 m.
						2,750	733.5	6.9	.....	60	5.97	wnw.	19.6	2,694	.....	
4:41	969.8	22.0	67	nw.	4.5	2,924	717.9	5.9	0.56	60	5.57	wnw.	20.9	2,865	.....	
						2,750	733.5	6.8	.....	60	5.93	wnw.	19.1	2,694	.....	
						2,500	756.0	8.2	.....	59	6.41	wnw.	16.6	2,450	.....	
						2,250	779.0	9.5	.....	59	7.00	wnw.	14.0	2,205	0	
						2,000	802.7	10.8	.....	59	7.64	nw.	11.4	1,960	0	
						1,750	827.0	12.2	.....	58	8.24	nw.	8.8	1,715	0	
5:03	969.9	22.0	68	nnw.	4.5	1,518	850.0	13.5	−1.01	58	8.97	nw.	6.4	1,488	0	1/10 A.Cu., w.; 2/10 Cu., nw.
						1,500	852.0	13.3	.....	63	9.62	nw.	6.5	1,470	0	Altitude of Cu. base about 1,500 m.
5:04	969.9	22.0	68	nnw.	4.5	1,419	860.2	12.5	0.58	87	12.61	nnw.	7.0	1,391	0	
						1,250	877.8	13.5	.....	85	13.15	nnw.	7.0	1,225	0	
						1,000	904.0	14.9	.....	83	14.06	nnw.	6.9	980	0	
5:22	969.7	21.2	67	nnw.	3.6	749	930.8	16.4	1.53	80	14.92	nnw.	6.9	734	0	
						500	957.5	20.2	.....	72	17.05	nnw.	3.9	490	0	
5:32	969.6	21.8	68	nnw.	2.7	396	969.6	21.8	.....	68	17.76	nnw.	2.7	388	.....	1/10 Ci.St., w.; 1/10 St.Cu., nw.

June 14, 1916.

A. M.																
11:39	967.8	22.8	51	wnw.	4.5	396	967.8	22.8	.....	51	14.16	wnw.	4.5	388	.....	Cloudless.
						500	956.0	21.5	.....	51	13.08	wnw.	4.9	490	0	
						750	929.0	18.4	.....	52	11.00	wnw.	5.8	735	0	
11:52	967.7	23.1	50	wnw.	4.5	810	922.4	17.7	1.23	52	10.53	wnw.	6.0	794	0	
						1,000	901.9	15.8	.....	54	9.69	w.	7.1	980	0	
P. M.																
12:14	967.3	23.4	49	wnw.	4.9	1,165	884.2	14.2	0.99	55	8.90	w.	8.0	1,142	0	
						1,250	875.1	13.5	.....	57	8.82	wnw.	8.5	1,225	0	Few Cu., wnw.
						1,500	849.0	11.4	.....	63	8.49	wnw.	9.8	1,470	0	
1:27	966.2	24.6	49	wnw.	7.2	1,637	835.2	10.2	0.85	66	8.22	nw.	10.6	1,604	0	
						1,750	823.6	9.4	.....	63	7.43	nw.	11.1	1,715	30	
						2,000	799.0	7.6	.....	56	5.85	nw.	12.2	1,960	110	
						2,250	775.5	5.7	.....	48	4.40	nw.	13.2	2,205	.....	
1:36	966.1	24.6	49	wnw.	7.2	2,392	762.0	4.6	0.78	44	3.73	nw.	13.8	2,344	.....	
						2,250	775.5	5.8	.....	44	4.06	nw.	13.6	2,205	.....	
						2,000	799.0	7.9	.....	45	4.79	wnw.	13.1	1,960	.....	
1:48	966.0	24.3	49	wnw.	8.5	1,851	813.8	9.1	0.81	45	5.20	wnw.	12.9	1,814	.....	3/10 Cl.St., w.; 2/10 St.Cu., nw.; 2/10 Cu.Nb., wnw.
						1,750	823.6	9.9	.....	48	5.86	wnw.	12.6	1,715	10,500	
						1,500	848.0	12.0	.....	55	7.72	wnw.	11.7	1,470	9,090	
						1,250	874.0	14.0	.....	62	9.91	nw.	10.8	1,225	8,500	9/10 St.Cu., wnw.
2:27	965.7	23.6	51	wnw.	4.5	1,186	880.8	14.5	1.00	64	10.57	nw.	10.6	1,163	.....	Thunderstorm.
2:35	965.7	22.8	51	wnw.	3.6	1,000	900.4	16.4	.....	63	11.75	wnw.	9.7	980	.....	Light rain 2:26 to 2:28 p. m.
						875	913.6	17.6	1.34	62	12.48	wnw.	9.1	858	.....	
						750	927.0	19.3	.....	59	13.21	wnw.	7.7	735	.....	
						500	954.0	22.6	.....	53	14.54	nw.	4.8	490	.....	
2:44	965.6	24.0	50	nw.	3.6	396	965.6	24.0	.....	50	14.92	nw.	3.6	388	.....	4/10 Ci., w.; 2/10 A.St., wnw.; few Cu.Nb., wnw.

June 15, 1916 (No. 1).

A. M.																
7:22	961.1	16.2	78	wnw.	4.5	396	961.1	16.2	.....	78	14.37	wnw.	4.5	388	.....	5/10 A.St., wnw.; 5/10 St.Cu., wnw.
						500	950.0	15.5	.....	79	13.91	wnw.	7.6	490	0	
						750	922.2	13.9	.....	82	13.02	nw.	15.0	735	0	
7:40	961.3	16.2	78	wnw.	5.4	784	918.4	13.7	0.58	82	12.86	nw.	16.0	769	0	
						750	922.2	13.9	.....	82	13.02	nw.	15.2	735	0	Rain began 7:47 a. m.
						500	950.0	15.2	.....	79	13.64	wnw.	8.9	490	0	
7:55	961.5	15.7	78	wnw.	6.3	396	961.5	15.7	.....	78	13.92	wnw.	6.3	388	.....	5/10 St.Cu., wnw.; 5/10 St., wnw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 15, 1916 (No. 2).

Time.	Surface. Pressure.	Temperature.	Relative humidity.	Wind. Dir.	Wind. Vel.	Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity. Rel.	Humidity. Vap. pres.	Wind. Dir.	Wind. Vel.	Potential. Gravity.	Potential. Electric.	Remarks.
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^6 *ergs.*	*volts.*	
10:25	960.6	19.0	58	nw.	9.8	396	960.6	19.0	.....	58	12.74	nw.	9.8	388	.....	5/10 Cu., nw.; 2/10 St.Cu., nw.
						500	948.7	17.8	.....	59	12.02	nw.	11.0	490	0	
						750	921.4	15.1	.....	61	10.47	nw.	13.7	735	0	
10:34	960.6	19.3	56	nw.	7.6	775	918.9	14.8	1.11	61	10.27	nw.	14.0	760	0	
						1,000	894.4	12.5	.....	65	9.42	nw.	14.5	980	0	5/10 Cu., nw.
						1,250	868.0	10.0	.....	70	8.60	nw.	15.1	1,225	0	
						1,500	842.1	7.5	.....	75	7.78	nw.	15.7	1,470	0	
10:56	960.4	19.6	51	nw.	9.4	1,506	841.8	7.4	1.01	75	7.72	nw.	15.7	1,476	0	
						1,750	816.8	5.3	.....	73	6.50	nw.	19.3	1,715	160	
						2,000	792.1	3.2	.....	70	5.38	nw.	23.0	1,960	320	Altitude of Cu. base about 2,000 m.
11:17	960.4	20.2	50	nw.	8.9	2,250	768.2	1.0	.....	68	4.47	nw.	26.7	2,205	690	
11:20	960.4	20.2	50	nw.	9.4	2,355	758.5	0.1	0.86	67	4.12	nw.	28.2	2,308	2,355	
11:30	960.4	20.3	49	nw.	8.5	2,440	750.6	1.3	−1.46	55	3.69	nw.	26.5	2,391	.....	
						2,341	760.1	−0.2	1.01	75	4.51	nw.	22.5	2,294	.....	
						2,250	768.2	0.7	.....	76	4.89	nw.	21.7	2,205	.....	6/10 Cu., nw.
						2,000	792.1	3.2	.....	78	6.00	nw.	19.6	1,960	470	
						1,750	816.8	5.8	.....	81	7.47	nw.	17.4	1,715	340	
P. M.																
12:07	960.4	20.3	49	nw.	8.0	1,592	833.4	7.4	1.08	82	8.45	nw.	16.0	1,560	260	
						1,500	842.1	8.4	.....	78	8.60	nw.	15.7	1,470	210	
						1,250	868.0	11.1	.....	68	8.98	nw.	15.0	1,225	50	
						1,000	894.4	13.8	.....	57	8.99	nw.	14.4	980	0	
12:38	960.4	19.9	45	nw.	9.8	823	913.6	15.7	0.87	50	8.92	nw.	13.9	807	0	
						750	921.4	16.3	.....	49	9.08	nw.	13.6	735	0	
						500	948.7	18.5	.....	47	10.01	nw.	12.5	490	0	
12:45	960.4	19.4	46	nw.	12.1	396	960.4	19.4	.....	46	10.36	nw	12.1	388	.....	6/10 Cu., nw.

June 16, 1916.

A. M.																
7:21	962.7	13.4	75	nnw.	5.4	396	962.7	13.4	.....	75	11.53	nnw.	5.4	388	.....	Cloudless.
						500	950.5	12.5	.....	77	11.16	nnw.	7.5	490	0	
7:26	962.8	14.0	77	nnw.	4.5	617	937.8	11.5	0.86	80	10.86	nnw.	9.9	605	0	
7:28	962.8	14.1	77	nnw.	4.5	744	923.7	12.2	−0.55	71	10.09	nnw.	10.0	730	0	
						750	923.0	12.2	.....	71	10.09	nnw.	10.1	735	0	
						1,000	895.5	10.3	.....	71	8.90	nnw.	12.4	980	0	
						1,250	869.0	8.3	.....	72	7.88	nnw.	14.6	1,225	20	
						1,500	842.7	6.4	.....	72	6.92	nnw.	16.9	1,470	290	
7:54	963.0	14.7	73	nw.	5.4	1,589	834.4	5.7	0.77	72	6.60	nnw.	17.7	1,557	380	
						1,750	817.5	4.7	.....	69	5.89	nnw.	16.4	1,715	470	
						2,000	792.9	3.2	.....	63	4.84	nnw.	14.3	1,960	610	
						2,250	769.2	1.7	.....	58	4.01	nnw.	12.3	2,205	770	
						2,500	746.1	0.2	.....	52	3.22	nnw.	10.2	2,450	1,030	
8:45	963.1	16.3	64	nw.	7.6	2,701	727.6	−1.0	0.60	48	2.70	nnw.	8.6	2,647	1,230	Few Cu., nnw.
						2,750	723.4	−1.3	.....	47	2.58	nnw.	8.9	2,694	1,280	
						3,000	701.2	−2.7	.....	43	2.10	nnw.	10.4	2,939	1,410	
						3,250	679.6	−4.0	.....	38	1.66	nnw.	12.0	3,184	1,550	
						3,500	658.5	−5.4	.....	34	1.32	nnw.	13.5	3,429	1,680	
						3,750	637.6	−6.7	.....	30	1.04	nnw.	15.0	3,673	1,910	
						4,000	617.8	−8.1	.....	26	0.80	nnw.	16.6	3,918	2,160	
10:00	963.1	17.7	54	n.	7.2	4,253	597.2	−9.4	0.54	22	0.60	nnw.	18.1	4,165	2,300	3/10 Cu., nnw.
						4,000	617.3	−8.1	.....	26	0.80	nnw.	17.3	3,918	1,910	
						3,750	637.6	−6.7	.....	30	1.04	nnw.	16.6	3,673	1,520	
						3,500	658.5	−5.4	.....	34	1.32	nnw.	15.8	3,429	1,300	
						3,250	679.6	−4.0	.....	37	1.62	nnw.	15.1	3,184	1,140	
						3,000	701.2	−2.7	.....	40	1.95	nnw.	14.3	2,939	990	
						2,750	723.4	−1.3	.....	44	2.41	nnw.	13.6	2,694	840	
10:58	963.1	18.2	54	nnw.	6.7	2,701	727.6	−1.0	0.60	45	2.53	nnw.	13.5	2,647	810	
						2,500	746.1	0.2	.....	50	3.10	nnw.	13.3	2,450	740	
						2,250	769.8	1.7	.....	56	3.87	nnw.	13.2	2,205	640	4/10 Cu., nnw.
						2,000	794.0	3.2	.....	62	4.77	nnw.	13.0	1,960	500	
						1,750	819.0	4.7	.....	68	5.81	nnw.	12.8	1,715	320	Altitude of Cu. base about 1,700 meters.
11:31	963.1	19.2	51	n.	5.8	1,549	839.4	5.9	1.20	73	6.78	nnw.	12.6	1,518	170	
						1,500	844.5	6.5	.....	72	6.97	nnw.	12.5	1,470	150	
						1,250	870.6	9.5	.....	65	7.72	nnw.	12.0	1,225	10	
						1,000	895.5	12.5	.....	58	8.40	nnw.	11.6	980	0	
11:51	963.1	19.8	48	nnw.	5.8	833	914.9	14.5	1.03	53	8.75	nnw.	11.3	817	0	
						750	924.4	15.4	.....	53	9.28	nnw.	9.8	735	0	
						500	952.1	17.9	.....	51	10.46	nnw.	6.8	490	0	
11:57	963.1	19.0	51	nnw.	5.4	396	963.1	19.0	.....	61	11.20	nnw.	5.4	388	.....	3/10 Cu., nnw.

June 17, 1916.

P. M.																
3:05	963.1	27.1	38	w.	4.9	396	963.1	27.1	.....	38	13.63	w.	4.9	388	.....	3/10 Cu., nw.
						500	951.4	26.2	.....	39	13.27	w.	5.1	490	0	Rain 4:05 to 4:20 p. m.
5:07	962.1	27.7	41	wnw.	5.4	737	925.6	24.0	0.91	40	11.94	w.	5.6	723	0	7/10 Cu., nw.
						750	924.1	23.8	.....	40	11.80	w.	5.6	735	0	
						1,000	897.8	20.8	.....	45	11.06	wnw.	6.7	980	0	
5:28	962.0	27.5	39	wnw.	4.9	1,183	878.8	18.5	1.23	49	10.44	wnw.	7.4	1,160	0	
						1,250	872.1	17.8	.....	50	10.19	wnw.	7.7	1,225	0	
						1,500	847.0	15.4	.....	53	9.28	nw.	8.7	1,470	0	
5:42	961.9	27.4	39	nw.	4.5	1,754	821.7	12.9	1.00	56	8.33	nw.	9.7	1,719	0	
						1,500	847.0	15.4	.....	53	9.28	nw.	9.0	1,470	0	
						1,250	872.1	18.0	.....	51	10.53	nw.	8.4	1,225	0	
5:55	961.8	27.2	40	nw.	3.6	1,166	880.5	18.9	1.16	50	10.92	nw.	8.2	1,143	0	3/10 Cu., nw.
						1,000	897.8	20.8	.....	47	11.55	nw.	7.1	980	0	
						750	924.1	23.7	.....	43	12.60	nw.	5.5	735	0	
6:07	961.8	27.3	41	nw.	2.7	633	936.2	25.1	0.89	41	13.07	nw.	4.7	621	0	
						500	950.3	26.3	.....	41	14.03	nw.	4.1	490	0	
6:14	961.8	27.2	41	nw.	3.6	396	961.8	27.2	.....	41	14.79	nw.	3.6	388	.....	2/10 Cu., nw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 18, 1916 1916 (No. 1.)

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\,m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	*°C.*	%		*m. p. s.*	*m.*	*mb.*	*°C.*		%	*mb.*		*m. p. s.*	*10^5 ergs.*	*volts.*	
7:10	965.3	17.0	82	ene.	3.6	396	965.3	17.0	.....	82	15.89	ene.	3.6	388	.....	4/10Cl.,nw.; fewSt.Cu.,ne.
						500	954.0	16.5	.....	78	14.64	ene.	5.6	490	0	
7:15	965.4	17.0	82	ene.	3.6	687	933.0	15.5	0.52	72	12.68	ene.	9.2	674	0	
						750	926.8	16.1	.....	68	12.44	ene.	7.2	735	0	
7:42	965.7	18.0	79	e.	4.5	820	918.9	16.8	−0.98	63	12.05	ene.	5.0	804	0	FewCl.St.,nw.; fewSt.Cu.,ne.
						1,000	900.0	15.2	.....	68	11.74	e.	3.4	980	0	
8:44	966.1	19.5	72	e.	4.9	1,166	882.5	13.7	0.68	72	11.29	e.	2.0	1,143	0	
						1,000	900.0	14.5	.....	74	12.22	e.	2.9	980	0	Few St.Cu., ne.
						750	926.8	15.7	.....	78	13.92	e.	4.3	735	0	
9:09	966.3	20.1	70	e.	3.6	680	934.8	16.0	1.48	70	14.36	e.	4.7	667	0	
						500	954.0	18.7	.....	72	15.53	e.	4.0	490	0	
9:16	966.4	20.2	68	e.	3.6	396	966.4	20.2	.....	68	16.10	e.	3.6	388	.....	1/10 St. Cu., ne.; 1/10 Cu., ne.

June 18, 1916 (No. 2).

P. M.																
12:11	967.2	20.4	71	e.	4.5	396	967.2	20.4	.....	71	17.02	e.	4.5	388	.....	9/10St.Cu.,nw.
						500	955.4	19.0	.....	76	16.70	ene.	5.6	490	0	
						750	927.7	15.5	.....	88	15.50	ene.	8.1	735	0	
12:18	967.1	19.9	71	ne.	4.9	799	922.6	14.8	1.39	90	15.15	ne.	8.6	783	0	
						1,000	900.2	13.2	.....	66	10.01	nne.	6.1	980	0	
5:15	966.9	18.7	67	n.	2.7	1,070	893.0	12.6	0.81	57	8.32	n.	5.2	1,049	0	9/10 St.Cu., nw.
						1,250	873.8	11.2	.....	69	9.18	nnw.	5.8	1,225	0	
						1,500	847.9	9.3	.....	86	10.08	nnw.	6.6	1,470	0	
5:30	966.9	18.8	67	n.	3.1	1,662	831.9	8.0	0.68	97	9.72	nw.	7.1	1,629	0	Altitude of St.Cu. base about 1,650 m.
						1,500	847.9	9.0	.....	93	10.68	nw.	7.4	1,470	0	
						1,250	873.8	10.4	.....	87	10.97	nnw.	7.9	1,225	0	
5:48	966.9	18.8	68	n.	2.7	1,185	880.9	10.8	1.05	86	11.14	nnw.	8.0	1,162	0	
						1,000	900.2	12.7	.....	80	11.75	nnw.	6.8	980	0	
						750	927.7	15.4	.....	73	12.78	n.	5.2	735	0	
6:03	966.9	18.9	68	n.	2.7	651	938.4	16.4	1.02	70	13.06	n.	4.6	638	0	
						500	955.4	17.9	.....	69	14.15	n.	2.9	490	0	
6:07	966.9	19.0	68	n.	1.8	396	966.9	19.0	.....	68	14.94	n.	1.8	388	.....	7/10 St.Cu., nw.

June 19, 1916.

P. M.																
7:36	964.0	17.2	62	ne.	3.1	396	964.0	17.2	.....	62	12.16	ne.	3.1	388	.....	2/10 A.St., w.; 2/10 A.Cu., w.; 6/10 St.Cu., w.
						500	952.8	16.7	.....	62	11.79	ne.	6.0	490	0	
7:37	964.0	17.2	62	ne.	3.1	646	936.0	15.9	0.52	62	11.20	ne.	10.1	633	0	
8:22	964.2	16.8	64	ne.	1.8	681	932.4	16.9	−2.86	55	10.59	ene.	5.0	668	0	
						750	926.0	16.3	.....	56	10.38	e.	5.2	735	0	
						1,000	899.8	14.2	.....	61	9.88	ese.	5.9	980	140	
						1,250	872.5	12.0	.....	66	9.26	ese.	6.5	1,225	390	
						1,500	846.1	9.9	.....	71	8.66	se.	7.2	1,470	630	
8:31	964.3	16.8	64	ne.	2.2	1,513	844.8	9.8	0.82	71	8.61	se.	7.2	1,483	640	10/10 St.Cu., w.
						1,500	846.1	9.9	.....	71	8.66	se.	7.2	1,470	680	Lightning in sw.
						1,250	872.5	11.9	.....	68	9.47	ese.	7.0	1,225	1,740	
						1,000	899.8	13.8	.....	64	10.10	ese.	6.8	980	2,800	
						750	926.0	15.8	.....	61	10.95	e.	6.6	735	2,200	Rain 8:45 to 8:53 p. m.
8:51	964.6	16.3	69	ne.	1.3	684	932.4	16.3	−0.07	60	11.12	e.	6.6	671	.....	
						500	952.8	16.2	.....	66	12.16	ene.	3.5	490	.....	
9:02	964.8	16.1	69	ne.	1.8	396	964.8	16.1	.....	69	12.63	ne.	1.8	388	.....	9/10 St. Cu., w.

June 20, 1916.

P. M.																
12:52	962.5	17.4	73	ene.	4.5	396	962.5	17.4	.....	73	14.51	ene.	4.5	388	.....	5/10 Cl.St., w.; 3/10 A.St., w.; 1/10 St.Cu., ene.
						500	951.0	16.0	.....	77	14.00	ene.	6.1	490	0	
						750	923.1	12.5	.....	87	12.61	ene.	9.9	735	70	Thin veil Fr.Cu.
1:03	962.5	17.1	73	ene.	6.3	769	921.0	12.2	1.39	88	12.50	ene.	10.2	754	80	22°-halo from 1:06 to 2:05.
						1,000	896.0	11.1	.....	89	11.76	ene.	7.5	980	240	
						1,250	870.5	10.0	.....	91	11.17	ene.	4.5	1,225	640	
3:49	962.5	18.5	67	ene.	6.7	1,338	860.8	9.6	0.60	91	10.87	ene.	3.5	1,312	.....	Altitude of Fr. Cu. base about 1,100 m.
						1,250	870.5	10.3	.....	89	11.15	ene.	4.5	1,225	.....	
						1,000	896.0	12.2	.....	82	11.65	ene.	7.4	980	110	3/10 Cl.St., w.; 3/10 St.Cu., ene.
						750	923.1	14.0	.....	75	11.98	ene.	10.3	735	10	
4:30	962.5	18.8	68	ene.	6.7	723	926.2	14.2	1.28	76	12.30	ene.	10.6	709	0	
						500	951.0	17.1	.....	71	13.84	ene.	8.6	490	0	
4:39	962.5	18.4	68	ene.	7.6	396	962.5	18.4	.....	68	14.39	ene.	7.6	388	.....	5/10 Cu., ene.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 21, 1916 (No. 1).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	*10^6 ergs.*	*volts.*	
9:45	967.9	16.7	70	ese.	13.9	396	967.9	16.7	.....	70	13.31	ese.	13.9	388	.....	6/10 A.St., ssw.; 4/10 St.Cu., sse.
						500	956.0	15.7	.....	73	13.02	ese.	13.8	490	10	
						750	928.5	13.2	.....	81	12.29	ese.	13.6	735	220	
9:51	967.9	16.7	68	ese.	15.6	802	922.6	12.7	0.99	83	12.19	ese.	13.5	786	260	
						1,000	901.0	11.8	.....	87	12.04	se.	17.1	980	690	
9:58	967.9	16.9	69	ese.	14.8	1,059	894.8	11.5	0.47	88	11.94	se.	18.2	1,038	750	
						1,250	874.3	15.3	.....	66	11.47	se.	15.5	1,225	710	
10:07	967.9	17.0	70	ese.	10.7	1,338	865.7	17.1	−2.01	56	10.92	se.	14.2	1,312	690	
						1,500	848.2	16.1	.....	60	10.98	se.	14.5	1,470	660	2/10 A.St., ssw.; 8/10 St. Cu., sse.
						1,750	823.1	14.5	.....	67	11.06	sse.	15.0	1,715	880	Altitude of St.Cu. base about 1,800 m.
						2,000	799.1	12.9	.....	74	11.01	sse.	15.6	1,960	1,120	
						2,250	776.0	11.3	.....	81	10.85	sse.	16.1	2,205	1,480	
						2,500	753.0	9.7	.....	88	10.59	s.	16.6	2,450	1,970	
10:41	967.7	17.2	71	se.	12.5	2,675	738.3	8.6	0.64	93	10.39	s.	17.0	2,621	2,300	
10:46	967.7	17.2	70	se.	12.5	2,743	732.0	11.6	−4.41	44	6.01	s.	16.3	2,688	2,450	
						2,750	731.1	11.6	.....	44	6.01	s.	16.3	2,694	2,460	
						3,000	709.8	10.4	.....	37	4.67	ssw.	17.1	2,939	3,000	
						3,250	689.0	9.1	.....	30	3.47	ssw.	17.8	3,184	3,540	
						3,500	668.0	7.9	.....	23	2.45	sw.	18.6	3,429	.....	
11:11	967.6	17.3	71	se.	13.9	3,678	653.6	7.0	0.53	18	1.80	sw.	19.2	3,603	.....	
						3,500	668.0	8.0	.....	30	3.22	sw.	19.0	3,429	.....	
						3,250	689.0	9.4	.....	48	5.66	sw.	18.7	3,184	.....	
11:37	967.6	17.6	70	ese.	13.0	3,044	705.5	10.6	−2.07	62	7.92	sw.	18.4	2,982	.....	
						3,000	709.8	9.7	.....	77	9.26	sw.	17.4	2,939	.....	
11:40	967.6	17.6	70	ese.	13.0	2,957	713.3	8.8	1.88	92	10.42	sw.	16.5	2,897	.....	Altitude of St.Cu. base about 1,300 m.
11:43	967.6	17.6	70	ese.	13.4	2,893	718.0	10.0	−0.59	86	10.56	sw.	16.5	2,835	.....	
						2,750	731.1	9.2	.....	91	10.59	sw.	16.5	2,694	.....	
11:47	967.6	17.6	71	ese.	10.7	2,705	735.2	8.9	0.76	93	10.60	sw.	16.5	2,650	.....	
						2,500	753.0	10.5	.....	91	11.56	ssw.	15.8	2,450	.....	
P. M.																
12:25	967.6	17.7	73	ese.	13.4	2,337	768.5	11.7	0.65	89	12.24	ssw.	15.3	2,290	.....	Electric potential very variable.
						2,250	776.0	12.3	.....	90	12.88	sw.	15.1	2,205	.....	
						2,000	800.1	13.9	.....	91	14.45	wsw.	14.6	1,960	.....	
						1,750	825.1	15.5	.....	92	16.20	w.	14.0	1,715	.....	
12:41	970.9	17.0	72	wnw.	10.7	1,679	833.7	16.0	−2.28	93	16.91	wnw.	13.8	1,646	.....	
						1,500	851.0	11.9	.....	94	13.09	wnw.	15.3	1,470	.....	
12:45	970.9	16.4	72	wnw.	11.2	1,376	864.0	9.1	0.46	95	10.98	wnw.	16.3	1,349	.....	Severe thunderstorm.
						1,250	877.2	9.5	.....	95	11.28	wnw.	15.4	1,225	.....	Heavy rain began 12:47 p. m.
						1,000	904.0	10.7	.....	95	12.23	nw.	13.6	980	.....	
						750	931.2	11.9	.....	94	13.09	nnw.	11.9	735	.....	
						500	958.9	13.1	.....	94	14.18	n.	10.1	490	.....	
12:50	970.9	13.6	94	n.	9.4	396	970.9	13.6	.....	94	14.65	n.	9.4	388	.....	10/10 St.Cu., wnw.

June 21, 1916 (No. 2).

P. M.																
2:21	966.8	15.8	90	e.	15.2	396	966.8	15.8	.....	90	16.16	e.	15.2	388	.....	10/10 St.Cu., se.
						500	954.8	15.2	.....	87	15.02	e.	16.9	490	0	
2:31	966.7	16.3	86	e.	17.0	721	930.5	13.9	0.58	82	13.02	e.	20.5	707	30	
						750	927.2	13.8	.....	82	12.94	e.	20.7	735	80	
						1,000	899.9	13.1	.....	82	12.37	ese.	22.0	980	490	
2:40	966.5	16.7	86	e.	17.0	1,090	890.3	12.8	0.30	82	12.12	ese.	22.5	1,069	540	9/10 St.Cu., se.
2:46	966.4	16.8	86	e.	17.0	1,240	874.8	14.1	−0.87	100	16.09	ese.	21.0	1,216	610	Altitude of St.Cu. base about 1,150 m.
						1,250	873.5	14.3	.....	99	16.14	ese.	20.8	1,225	610	
2:57	966.2	17.4	84	se.	16.1	1,440	854.4	18.7	−2.30	79	17.04	se.	18.0	1,412	790	
						1,500	848.1	18.2	.....	81	16.93	se.	19.1	1,470	840	
3:04	966.2	17.3	80	se.	16.1	1,696	829.2	16.7	0.73	87	16.54	se.	22.5	1,662	1,000	9/10 St.Cu., se.
						1,500	848.1	18.1	.....	80	16.62	ese.	22.0	1,470	580	
3:11	966.2	17.6	78	se.	17.4	1,406	857.8	18.7	−2.25	77	16.61	ese.	21.8	1,378	370	
						1,250	873.5	15.2	.....	95	16.41	ese.	.....	1,225	40	
3:16	966.2	17.7	78	ese.	17.0	1,206	878.2	14.2	−1.44	100	16.19	ese.	.....	1,182	0	
3:21	966.2	17.6	79	ese.	16.1	1,123	886.8	13.0	1.40	97	14.53	ese.	.....	1,101	0	
3:30	966.2	17.7	80	ese.	14.3	1,073	892.0	13.7	0.11	86	13.48	ese.	.....	1,052	0	
						1,000	899.9	13.8	.....	87	13.73	ese.	.....	980	0	
						750	927.2	14.1	.....	89	14.32	ese.	.....	735	0	
3:36	966.2	17.8	79	ese.	14.3	637	939.3	14.2	1.58	90	14.57	ese.	.....	624	0	
						500	954.8	16.4	.....	83	15.48	ese.	.....	490	0	
3:42	966.2	18.0	78	ese.	13.9	396	966.2	18.0	.....	78	16.10	ese.	13.9	388	.....	10/10 St.Cu., s.

June 22, 1916.

P. M.																
12:59	963.5	29.2	68	s.	9.8	396	963.5	29.2	.....	68	27.56	s.	9.8	388	.....	1/10 Ci., sw.; 3/10 St.Cu., s.
						500	952.7	27.9	.....	68	27.06	s.	11.9	490	0	
						750	926.0	24.8	.....	81	25.36	sse.	17.1	735	0	
1:06	963.5	29.2	69	s.	9.8	756	925.2	24.7	1.25	81	25.21	sse.	17.2	741	0	
						1,000	900.0	22.2	.....	86	23.02	s.	18.2	980	0	
						1,250	874.5	19.6	.....	91	20.76	s.	19.3	1,225	0	Altitude of St.Cu. base about 1,300 m.
1:26	963.3	29.5	67	s.	10.3	1,464	852.7	17.4	1.03	95	18.88	ssw.	20.2	1,435	0	
						1,500	849.3	18.2	.....	86	17.97	ssw.	20.6	1,470	10	6/10 St.Cu., s.
1:34	963.3	29.9	68	s.	9.8	1,688	830.9	22.6	−2.32	41	11.25	ssw.	23.0	1,654	60	
						1,750	825.1	22.2	.....	41	10.98	ssw.	22.6	1,715	80	
						2,000	801.5	20.4	.....	40	9.59	ssw.	21.2	1,960	150	
						2,250	778.6	18.7	.....	38	8.20	ssw.	19.8	2,205	220	
1:47	963.2	29.2	67	s.	12.6	2,321	772.0	18.2	0.70	38	7.94	ssw.	19.4	2,274	240	
						2,500	755.8	16.5	.....	38	7.13	ssw.	19.6	2,450	320	4/10 St.Cu., ssw.
						2,750	733.8	14.1	.....	37	5.95	ssw.	20.0	2,694	460	
2:20	962.9	30.2	65	s.	9.4	2,935	718.0	12.3	0.94	37	5.29	ssw.	20.2	2,875	565	
						2,750	733.8	14.0	.....	36	5.75	ssw.	21.4	2,694	460	
						2,500	755.8	16.3	.....	34	6.30	ssw.	23.0	2,450	310	Altitude of Cu. base about 1,650 m.
						2,250	778.6	18.6	.....	32	6.86	ssw.	24.5	2,205	160	
3:03	962.5	30.7	64	s.	11.2	2,137	788.2	19.6	−2.88	31	7.07	ssw.	25.2	2,094	90	4/10 Cu., s.
3:09	962.4	30.6	64	s.	11.2	1,998	801.2	15.6	.....	70	12.40	ssw.	22.0	1,958	0	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Clock cylinder slipped.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 23, 1916 (No. 1).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
8:46	968.1	19.0	81	wnw.	4.5	396	968.1	19.0	.....	81	17.80	wnw.	4.5	388	.....	1/10 Ci.St., ssw.
8:50	968.2	18.9	81	wnw.	3.6	499	956.8	17.4	1.55	74	14.70	wnw.	7.5	489	0	
8:52	968.2	18.8	81	wnw.	3.6	707	933.8	18.9	−0.72	40	8.74	wnw.	7.5	693	0	
						750	929.1	18.6	.....	39	8.36	wnw.	7.9	735	0	
						1,000	902.1	16.8	.....	36	6.89	wnw.	8.9	980	0	
						1,250	875.6	14.9	.....	32	5.42	wnw.	10.0	1,225	0	
						1,500	950.0	13.1	.....	29	4.37	wnw.	11.0	1,470	0	
9:45	968.2	20.3	67	wnw.	6.3	1,714	829.2	11.5	0.73	26	3.53	wnw.	11.9	1,680	0	
						1,750	825.0	11.1	.....	26	3.43	wnw.	12.1	1,715	0	
						2,000	800.8	8.6	.....	29	3.24	wnw.	13.4	1,960	0	
						2,250	777.3	6.1	.....	32	3.01	wnw.	14.6	2,205	90	
10:10	968.3	21.0	66	wnw.	5.8	2,340	768.9	5.2	1.01	33	2.92	wnw.	15.1	2,293	130	
						2,500	754.3	5.7	.....	29	2.66	wnw.	20.7	2,450	210	
						2,750	732.0	6.5	.....	22	2.13	w.	29.4	2,694	330	
10:35	968.4	21.3	61	wnw.	4.5	2,811	726.2	6.7	−0.39	20	1.96	w.	31.5	2,754	425	
						2,750	732.0	6.4	.....	21	2.02	w.	28.7	2,694	400	
						2,500	754.3	5.3	.....	27	2.41	wnw.	16.7	2,450	280	
11:10	968.6	22.0	57	wnw.	4.0	2,396	764.1	4.8	0.92	30	2.58	wnw.	11.7	2,348	230	Few Ci.St., ssw.
						2,250	777.3	6.1	.....	30	2.83	wnw.	11.9	2,205	170	
						2,000	800.8	8.4	.....	29	3.20	wnw.	12.2	1,960	110	
						1,750	825.0	10.7	.....	28	3.60	wnw.	12.4	1,715	50	
						1,500	850.0	13.0	.....	27	4.04	wnw.	12.6	1,470	0	
11:36	968.8	22.6	52	wnw.	4.9	1,256	876.4	15.3	0.75	27	4.69	wnw.	13.0	1,231	0	
						1,250	877.0	15.3	.....	27	4.69	wnw.	12.9	1,225	0	
						1,000	902.1	17.2	.....	36	7.06	wnw.	9.5	980	0	
						750	929.1	19.1	.....	45	9.95	wnw.	6.1	735	0	
11:51	968.9	23.0	56	wnw.	5.8	602	946.1	20.2	1.46	50	11.84	wnw.	4.3	590	0	
						500	957.0	21.7	.....	52	13.50	wnw.	5.0	490	0	
11:55	968.9	23.2	54	wnw.	5.8	396	968.9	23.2	.....	54	15.36	wnw.	5.8	388	.....	Few Ci.St., ssw.

June 23, 1916 (No. 2).

P. M.																
12:44	968.7	24.0	44	wsw.	5.8	396	968.7	24.0	.....	44	13.13	wsw.	5.8	388	.....	Few Ci.St., ssw.
						500	957.1	22.6	.....	43	11.79	wsw.	7.2	490	0	
12:51	968.6	24.1	45	w.	6.7	707	934.5	19.9	1.32	40	9.30	w.	10.1	693	0	
						750	929.7	19.5	.....	41	9.29	w.	10.0	735	0	
						1,000	902.2	17.2	.....	45	8.83	w.	9.3	980	0	
1:20	968.5	24.7	44	w.	7.6	1,149	887.5	15.9	0.90	47	8.49	w.	8.9	1,126	0	
						1,250	876.3	14.8	.....	47	7.91	w.	9.1	1,225	0	Few Cu., w
						1,500	851.0	12.0	.....	48	6.73	w.	9.8	1,470	0	
2:08	968.2	24.8	36	w.	4.9	1,722	828.6	9.5	1.12	49	5.82	w.	10.3	1,688	0	
						1,750	825.0	9.3	.....	49	5.74	w.	10.6	1,715	20	
						2,000	800.9	7.5	.....	48	4.98	w.	13.0	1,960	180	
						2,250	777.0	5.7	.....	48	4.40	wnw.	15.4	2,205	330	
						2,500	753.8	3.9	.....	47	3.80	wnw.	17.8	2,450	570	
3:07	967.9	24.8	39	w.	6.3	2,732	732.2	2.2	0.72	46	3.29	wnw.	20.0	2,677	790	
						2,750	731.1	2.4	.....	45	3.27	wnw.	20.6	2,694	810	
3:09	967.9	24.8	39	w.	6.3	2,906	716.6	3.9	−0.98	37	2.99	wnw.	25.5	2,847	960	
						3,000	709.0	3.3	.....	34	2.63	wnw.	25.4	2,939	1,050	
						3,250	686.8	1.8	.....	26	1.81	wnw.	25.0	3,184	1,290	
3:22	967.9	24.8	39	w.	7.2	3,279	684.2	1.6	0.80	25	1.72	wnw.	25.0	3,212	1,315	
						3,250	686.8	1.9	.....	25	1.75	wnw.	24.7	3,184	1,280	
3:30	967.9	24.8	39	w.	4.9	3,014	707.2	4.2	−1.84	25	2.06	wnw.	22.5	2,953	940	
						3,000	709.0	3.9	.....	26	2.10	wnw.	22.6	2,939	920	
3:37	967.9	24.8	39	w.	7.2	2,889	718.1	1.9	1.62	31	2.17	wnw.	23.0	2,831	755	
						2,750	731.1	4.1	.....	30	2.46	wnw.	21.8	2,694	650	
3:41	967.9	24.8	39	w.	6.7	2,716	733.7	4.7	−15.00	30	2.56	wnw.	21.5	2,661	630	
3:45	967.9	24.7	40	wnw.	8.0	2,698	735.3	2.0	0.72	41	2.89	wnw.	18.5	2,644	620	
						2,500	753.8	3.4	.....	50	3.90	wnw.	16.3	2,450	470	
						2,250	777.0	5.2	.....	61	5.40	wnw.	13.5	2,205	290	
3:58	967.9	24.7	40	wnw.	6.3	2,020	799.2	6.9	1.05	71	7.06	wnw.	11.0	1,980	120	
						2,000	800.9	7.1	.....	71	7.16	wnw.	10.9	1,960	100	
						1,750	825.8	9.7	.....	65	7.82	wnw.	9.8	1,715	0	
						1,500	850.4	12.3	.....	58	8.30	wnw.	8.6	1,470	0	
						1,250	875.9	14.9	.....	52	8.81	wnw.	7.5	1,225	0	
4:23	967.8	24.6	40	wnw.	5.4	1,092	892.7	16.6	0.92	48	9.07	wnw.	6.8	1,071	0	
						1,000	902.0	17.4	.....	46	9.14	wnw.	6.8	980	0	
						750	928.8	19.7	.....	42	9.64	wnw.	6.7	735	0	
4:35	967.7	24.9	42	wnw.	4.9	635	941.5	20.8	1.67	40	9.83	wnw.	6.6	622	0	
						500	956.0	23.1	.....	41	11.59	wnw.	5.1	490	0	
4:40	967.7	24.8	42	wnw.	4.0	396	967.7	24.8	.....	42	13.15	wnw.	4.0	388	.....	Few Cu., w.

June 23, 1916 (No. 3).

P. M.																
5:11	967.5	24.9	42	w.	4.9	396	967.5	24.9	.....	42	13.23	w.	4.9	388	.....	Few Cu., w.
						500	955.9	23.6	.....	41	11.94	w.	5.9	490	0	
						750	928.0	20.6	.....	39	9.47	w.	8.1	735	0	Cloudless.
6:39	967.0	23.1	54	w.	3.1	789	924.0	20.1	0.75	39	9.18	w.	8.5	774	0	
						750	928.0	20.2	.....	42	9.95	w.	7.8	735	0	
						500	955.5	20.9	.....	60	14.83	wnw.	3.6	490	0	
8:04	967.2	21.2	67	wnw.	1.8	396	967.2	21.2	.....	67	16.87	wnw.	1.8	388	.....	Cloudless.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 24, 1916.

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\,m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°C.	%		*m. p. s.*	*m.*	*mb.*	°C.		%	*mb.*		*m. p. s.*	10^6 *ergs.*	*volts.*	
8:14	970.6	18.1	75	nw.	3.1	396	970.6	18.1		75	15.58	nw.	3.1	388		Cloudless.
						500	957.4	17.6		72	14.49	nw.	4.7	490	0	
						750	931.2	16.4		65	12.12	nw.	8.4	735	0	
						1,000	904.9	15.2		58	10.02	nw.	12.2	980	0	
8:46	970.6	18.4	65	nw.	3.1	1,235	879.4	14.1	0.48	52	8.37	nw.	15.8	1,211	0	
						1,250	878.8	14.0		52	8.31	nw.	15.8	1,225	0	
						1,500	853.0	12.0		53	7.44	nw.	16.5	1,470	0	
						1,750	827.7	10.0		54	6.63	wnw.	17.1	1,715	60	
						2,000	802.5	8.0		55	5.90	wnw.	17.8	1,960	150	
9:18	970.6	19.0	60	nnw.	3.6	2,198	783.2	6.4	0.80	56	5.38	wnw.	18.3	2,154	210	
						2,250	778.8	6.9		46	4.58	wnw.	19.1	2,205	230	
9:27	970.6	19.2	62	nnw.	3.6	2,370	767.1	8.1	−0.99	24	2.59	wnw.	21.0	2,322	260	
						2,500	755.6	7.4		25	2.58	wnw.	21.3	2,450	350	
						2,750	733.0	6.1		27	2.54	wnw.	21.9	2,694	510	
						3,000	711.0	4.7		28	2.39	wnw.	22.6	2,939	660	
						3,250	689.6	3.4		30	2.34	wnw.	23.2	3,184	780	
10:28	970.6	20.0	59	nw.	3.1	3,310	684.3	3.1	0.58	30	2.29	wnw.	23.3	3,243	810	
						3,250	689.6	3.5		30	2.36	wnw.	23.1	3,184	780	
						3,000	711.0	5.1		29	2.55	wnw.	22.4	2,939	630	
						2,750	733.0	6.6		28	2.73	wnw.	21.8	2,694	490	
						2,500	755.6	8.2		27	2.93	wnw.	21.1	2,450	340	
11:04	970.6	21.1	60	wnw.	2.7	2,256	778.4	9.7	−2.14	26	3.13	wnw.	20.5	2,211	230	
						2,250	778.8	9.6		26	3.11	wnw.	20.3	2,205	230	
11:10	970.6	21.0	60	nw.	2.7	2,172	786.4	7.9	0.81	32	3.41	wnw.	15.0	2,129	200	
						2,000	802.5	9.3		35	4.10	wnw.	14.7	1,960	150	
						1,750	827.7	11.3		40	5.36	nw.	14.2	1,715	60	
11:28	970.6	21.2	60	nw.	2.7	1,668	835.5	12.0	0.45	42	8.89	nw.	14.0	1,635	30	
						1,500	853.0	12.8		47	6.95	nw.	11.8	1,470	0	
						1,250	878.8	13.9		56	8.89	nnw.	8.5	1,225	0	
						1,000	904.9	15.0		64	10.91	nnw.	5.2	980	0	
11:38	970.6	21.4	56	nnw.	3.1	894	915.7	15.5	1.29	67	11.80	nnw.	3.8	877	0	
						750	931.2	17.4		65	12.92	nnw.	3.6	735	0	
						500	957.4	20.6		61	14.80	nnw.	3.2	490	0	
11:47	970.6	21.9	60	nnw.	3.1	396	970.6	21.9		60	15.77	nnw.	3.1	388		Cloudless.

June 25, 1916.

A. M.																
7:08	966.2	18.9	80	sse.	4.5	396	966.2	18.9		80	17.47	sse.	4.5	388		8/10 Ci.St.,wsw.;1/10St.Cu.,sw.
						500	954.1	18.2		74	15.47	sse.	11.5	490	0	
7:11	966.3	19.0	78	sse.	4.5	535	950.8	18.0	0.65	72	14.86	sse.	13.9	524	0	
7:12	966.3	19.0	78	sse.	4.5	711	931.4	19.9	−1.08	62	14.41	sse.	12.5	697	0	Few Ci., ssw.; 1/10 A.Cu., sw.; 7/10 St.Cu., sw.
						750	927.0	19.7		62	14.23	sse.	12.4	735	0	
						1,000	900.8	18.2		63	13.17	sse.	12.0	980	0	
						1,250	875.1	16.6		64	12.09	sse.	11.5	1,225	50	
7:42	966.4	19.4	79	s.	4.9	1,441	855.4	15.4	0.62	65	11.38	sse.	11.2	1,413	150	4/10 St.Cu., sw.
						1,500	850.2	15.0		66	11.25	sse.	10.9	1,470	160	
						1,750	825.3	13.4		68	10.45	s.	9.8	1,715	240	
						2,000	801.2	11.9		70	9.75	s.	8.6	1,960	320	3/10 St.Cu., wsw.
						2,250	777.3	10.3		72	9.02	ssw.	7.5	2,205	425	
8:46	966.3	21.7	73	sse.	4.5	2,364	766.7	9.6	0.82	73	8.72	ssw.	7.0	2,317		Few Ci., w.
						2,250	777.3	10.8		69	8.94	ssw.	7.1	2,205		
						2,000	801.2	13.3		61	9.31	ssw.	7.2	1,960		
						1,750	825.3	15.8		53	9.51	ssw.	7.3	1,715		
9:20	966.1	22.4	71	s.	4.0	1,731	827.0	16.0	0.59	52	9.45	ssw.	7.3	1,697		
						1,500	850.2	17.4		51	10.13	ssw.	5.9	1,470		
						1,250	875.1	18.8		49	10.63	s.	4.5	1,225		
10:11	965.9	23.4	68	s.	4.5	1,224	877.5	19.0	−0.57	49	10.77	s.	4.3	1,200		
						1,000	900.8	17.7		68	13.77	s.	5.2	980		
10:17	965.9	23.6	68	s.	6.7	892	912.1	17.1	1.35	77	15.02	s.	5.6	875		
						750	927.0	19.0		75	16.48	s.	5.4	735		22°-halo after 10:25 a. m.
						500	954.1	22.4		71	19.23	ssw.	5.0	490		
10:33	965.9	23.8	69	ssw.	4.9	396	965.9	23.8		69	20.35	ssw.	4.9	388		4/10 Ci., w.; few Cu., sw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 26, 1916 (No. 1).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\,m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
7:34	968.4	18.6	85	n.	4.9	396	968.4	18.6	.....	85	18.22	n.	4.9	388	.....	2/10 Cl.St.,wnw.; few Cu., nnw.
						500	957.0	17.8	.....	85.	17.32	n.	8.9	490	0	
7:39	968.5	18.1	90	n.	4.0	691	935.7	16.2	0.81	86	15.84	nne.	16.3	678	0	
						750	929.9	16.3	.....	80	14.82	nne.	15.8	735	0	
7:47	968.5	19.2	83	n.	4.0	958	907.6	16.8	−0.23	60	11.55	n.	14.0	933	0	
						1,000	902.7	16.5	.....	60	11.26	n.	13.9	980	0	
						1,250	876.0	15.1	.....	60	10.30	n.	13.4	1,225	0	Altitude of Cu. base about 1,300 m.
						1,500	851.7	13.8	.....	61	9.63	nnw.	12.8	1,470	0	
						1,750	826.7	12.4	.....	61	8.78	nnw.	12.3	1,715	80	
8:33	968.9	20.1	78	n.	3.6	1,903	811.3	11.5	0.56	61	8.28	nnw.	12.0	1,865	130	
8:44	969.0	20.7	78	n.	5.4	2,000	802.5	11.8	.....	57	7.89	nnw.	12.1	1,960	160	
						2,230	780.5	12.4	−0.28	46	6.62	nw.	12.3	2,185	130	
						2,250	779.0	12.2	.....	46	6.54	nw.	12.3	2,205	130	
						2,500	755.0	10.2	.....	48	5.98	nw.	12.8	2,450	80	
						2,750	733.3	8.2	.....	51	5.54	nw.	13.2	2,694	30	
						3,000	711.2	6.2	.....	54	5.12	wnw.	13.6	2,939	60	
						3,250	690.1	4.3	.....	56	4.65	wnw.	14.0	3,184	220	
9:31	969.4	21.2	72	n.	4.5	3,317	684.7	3.8	0.79	57	4.57	wnw.	14.1	3,249	260	Few Cl.St.,wnw.; few Cu.,nnw.
						3,500	669.6	2.4	.....	60	4.36	wnw.	15.3	3,429	380	
						3,750	649.4	0.6	.....	64	4.08	wnw.	17.0	3,673	540	
						4,000	630.0	−1.3	.....	69	3.78	wnw.	18.6	3,918	700	
						4,250	611.0	−3.2	.....	74	3.46	wnw.	20.2	4,162	850	
						4,500	591.6	−5.0	.....	78	3.13	wnw.	21.9	4,407	1,000	1/10 Cl.St., wnw.
10:23	969.6	21.8	63	n.	3.1	4,641	580.4	−6.0	0.79	81	2.98	wnw.	22.8	4,545	.....	
						4,500	591.6	−4.8	.....	78	3.18	wnw.	22.2	4,407	.....	
						4,250	611.0	−2.7	.....	73	3.56	wnw.	21.2	4,162	.....	
						4,000	630.0	−0.6	.....	68	3.95	wnw.	20.1	3,918	.....	
						3,750	649.4	1.5	.....	62	4.22	wnw.	19.0	3,673	.....	
						3,500	669.6	3.6	.....	57	4.51	wnw.	18.0	3,429	510	
P. M.																
12:12	970.0	22.7	60	n.	2.7	3,413	677.1	4.3	0.69	55	4.57	wnw.	17.6	3,343	470	Few Cl.St.,wnw.; few Cu.,nnw.
						3,250	690.1	5.4	.....	53	4.75	wnw.	17.1	3,184	400	
						3,000	711.2	7.1	.....	49	4.94	wnw.	16.3	2,939	280	
						2,750	733.3	8.9	.....	46	5.24	nw.	15.6	2,694	230	
						2,500	755.0	10.6	.....	42	5.37	nw.	14.8	2,450	190	
12:37	970.1	22.4	59	n.	3.1	2,408	764.4	11.2	0.17	41	5.45	nw.	14.5	2,360	170	
						2,250	779.0	11.5	.....	38	5.16	nw.	13.3	2,205	0	
						2,000	802.5	11.9	.....	32	4.46	nnw.	11.4	1,960	0	
12:47	970.2	22.4	59	n.	4.0	1,809	821.2	12.2	−0.22	28	3.98	nnw.	10.0	1,773	0	
						1,750	826.7	12.1	.....	33	4.66	nnw.	9.3	1,715	0	
						1,500	851.7	11.5	.....	55	7.46	nnw.	6.2	1,470	0	
12:54	970.3	22.4	57	nnw.	4.0	1,491	852.9	11.3	0.75	56	7.60	nnw.	6.1	1,462	0	
						1,250	877.2	13.3	.....	62	9.47	nnw.	5.8	1,225	0	
						1,000	904.0	15.2	.....	68	11.74	nnw.	5.4	980	0	
1:04	970.3	22.3	57	n.	4.0	983	905.9	15.3	0.60	68	11.82	nnw.	5.4	964	0	
						750	931.1	16.7	.....	62	11.79	nnw.	5.0	735	0	
1:10	970.4	22.3	57	n.	4.5	565	951.5	17.8	2.66	58	11.82	nnw.	4.7	554	0	
						500	959.0	19.5	.....	58	13.15	nnw.	4.6	490	0	
1:12	970.4	22.3	58	nnw.	4.5	396	970.4	22.3	.....	58	15.62	nnw.	4.5	388	.....	Few Cl.St.,wnw.; few Cu., nnw.

June 26, 1916 (No. 2).

P. M.																
2:04	970.6	22.6	54	n.	3.6	396	970.6	22.6	.....	54	14.81	n.	3.6	388	.....	Few Cl.St.,wnw.; few Cu.,nnw.
						500	959.0	21.1	.....	55	13.77	n.	4.4	490	0	
						750	932.0	17.6	.....	59	11.88	n.	6.2	735	0	
2:34	970.4	22.6	57	n.	3.1	862	919.2	16.0	1.42	60	10.91	n.	7.0	845	0	
						1,000	900.5	14.7	.....	65	10.87	n.	7.0	980	0	
3:52	970.3	22.5	57	n.	4.0	1,252	877.8	12.3	1.02	75	10.74	n.	7.0	1,227	0	
						1,000	900.5	15.0	.....	67	11.42	n.	6.1	980	0	
4:27	970.4	22.7	54	n.	2.7	911	914.0	16.0	1.32	64	11.64	n.	5.8	893	0	
						750	932.0	18.1	.....	61	12.67	n.	4.8	735	0	
						500	959.0	21.4	.....	56	14.27	n.	3.3	490	0	
4:40	970.5	22.8	54	n.	2.7	396	970.5	22.8	.....	54	14.99	n.	2.7	388	.....	Few Cl.St.,wnw.; few Cu.,nnw.

June 27, 1916.

P. M.																
4:40	971.4	24.4	62	ese.	4.0	396	971.4	24.4	.....	62	18.95	ese.	4.0	388	.....	9/10 Cl., w.
						500	959.8	23.0	.....	64	17.98	ese.	4.6	490	0	
						750	932.2	19.8	.....	70	16.17	se.	5.9	735	0	
5:45	971.0	23.9	63	se.	3.1	762	930.9	19.6	1.31	70	15.97	se.	6.0	747	0	
						1,000	900.5	17.4	.....	72	14.31	se.	6.8	980	0	
6:48	970.7	23.0	70	se.	2.7	1,186	885.7	15.6	0.94	74	13.11	se.	7.5	1,163	0	
						1,250	879.2	15.9	.....	61	11.02	se.	7.5	1,225	0	
7:01	970.6	22.8	71	se.	2.7	1,333	870.3	16.4	0.27	45	8.39	se.	7.4	1,307	0	5/10 Cl.St.,w.; 5/10 A.St.,w.
						1,250	879.2	16.4	.....	43	8.02	se.	6.7	1,225	0	
7:06	970.6	22.7	72	sse.	2.7	1,219	882.2	16.4	0.65	42	7.83	se.	6.4	1,195	0	
						1,000	900.5	17.8	.....	56	11.41	se.	7.4	980	0	
7:15	970.5	22.5	72	se.	2.2	757	930.9	19.4	0.83	72	16.22	se.	8.5	742	0	
						750	931.5	19.5	.....	72	16.32	se.	8.4	735	0	
						500	959.0	21.5	.....	73	18.72	se.	4.0	490	0	
7:22	970.5	22.4	73	se.	2.2	396	970.5	22.4	.....	73	19.78	se.	2.2	388	.....	5/10 Cl.St., w.; 3/10 A.St. w.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 28, 1916, series (No. 1).

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^6 *ergs.*	*volts.*	
7:29	970.9	21.2	77	s.	4.9	396	970.9	21.2	.....	77	19.39	s.	4.9	388	.....	2/10 Ci.St., w.
						500	959.7	20.0	.....	77	18.00	s.	10.1	490	0	
7:31	970.9	21.3	77	s.	4.9	591	949.3	19.0	1.13	77	16.92	s.	14.6	579	0	
						750	933.1	21.3	.....	85	21.53	ssw.	12.2	735	0	
7:38	970.9	21.6	79	s.	4.5	785	928.2	21.8	−1.44	87	22.72	ssw.	11.7	770	0	
						1,000	906.2	20.4	.....	89	21.33	ssw.	10.6	980	0	
						1,250	880.0	18.8	.....	90	19.53	ssw.	9.3	1,225	0	
7:56	970.9	22.2	76	s.	4.9	1,352	869.4	18.2	0.63	91	19.02	ssw.	8.8	1,325	0	3/10 Ci., w.
9:07	970.3	24.2	71	sse.	4.9	1,433	860.9	19.2	−1.23	70	15.58	s.	6.9	1,405	0	2/10 Ci., w.
						1,500	854.0	18.8	.....	71	15.41	s.	6.9	1,470	100	
						1,750	828.8	17.2	.....	73	14.32	s.	6.8	1,715	180	
						2,000	804.8	15.6	.....	75	13.29	ssw.	6.7	1,960	290	
						2,250	781.5	14.0	.....	77	12.30	ssw.	6.6	2,205	390	
10:55	969.3	26.4	71	sse.	5.4	2,463	762.4	12.6	0.64	79	11.53	ssw.	6.5	2,414	470	1/10 Ci., w.
						2,500	758.8	12.4	.....	77	11.09	ssw.	6.9	2,450	490	
						2,750	736.8	11.4	.....	64	8.63	sw.	9.5	2,694	750	
						3,000	715.2	10.3	.....	52	6.52	sw.	12.1	2,939	.....	
						3,250	694.0	9.3	.....	39	4.57	wsw.	14.7	3,184	.....	
11:22	969.0	26.6	71	s.	6.7	3,368	684.3	8.8	0.44	33	3.74	wsw.	15.9	3,299	.....	
						3,250	694.0	9.3	.....	39	4.57	wsw.	15.3	3,184	.....	
						3,000	715.2	10.5	.....	52	6.60	wsw.	14.1	2,939	810	
						2,750	736.8	11.6	.....	64	8.74	sw.	12.9	2,694	620	
						2,500	758.8	12.8	.....	77	11.38	sw.	11.7	2,450	530	
11:59	968.6	27.7	68	s.	6.7	2,467	762.4	12.9	0.80	79	11.76	sw.	11.5	2,417	515	1/10 Ci., w.; few Cu., s.
						2,250	781.5	14.6	.....	72	11.97	sw.	11.4	2,205	490	
						2,000	804.8	16.6	.....	64	12.09	ssw.	11.2	1,960	340	
						1,750	828.9	18.6	.....	55	11.79	ssw.	11.1	1,715	150	
P. M.																
12:21	968.4	28.0	67	s.	7.2	1,577	845.7	20.0	0.29	49	11.46	ssw.	11.0	1,546	0	
						1,500	853.1	20.2	.....	52	12.31	ssw.	11.1	1,470	0	
12:30	968.2	27.8	68	s.	7.2	1,371	866.0	20.6	−0.76	56	13.59	ssw.	11.3	1,344	0	
						1,250	878.3	19.7	.....	81	18.59	ssw.	12.1	1,225	0	
12:35	968.2	27.9	69	s.	5.8	1,187	884.7	19.2	1.06	94	20.92	ssw.	12.5	1,164	0	
						1,000	904.3	21.2	.....	87	21.91	ssw.	12.0	980	0	
12:47	968.1	27.9	66	s.	7.2	751	930.0	23.8	1.21	77	22.43	s.	11.3	736	0	
						500	957.0	26.8	.....	69	24.32	s.	7.8	490	0	
12:53	968.0	28.1	66	s.	6.3	396	968.0	28.1	.....	66	25.10	s.	6.3	388	.....	Few Ci., w.; 1/10 Cu., s.

June 28, 1916, series (No. 2).

P. M.																
2:14	967.4	28.9	64	s.	6.3	396	967.4	28.9	.....	64	25.50	s.	6.3	388	.....	1/10 Ci.St., w.; 1/10 Cu., s.
						500	955.8	27.7	.....	67	24.89	s.	7.1	490	0	
						750	928.9	24.8	.....	74	23.17	s.	9.0	735	0	
						1,000	902.0	21.8	.....	80	20.90	ssw.	10.8	980	0	
2:30	967.0	29.2	62	s.	6.3	1,157	886.8	20.0	1.17	84	19.64	ssw.	12.0	1,134	0	
						1,250	876.0	19.4	.....	84	18.93	ssw.	12.3	1,225	0	
						1,500	850.1	18.7	.....	82	17.69	ssw.	12.9	1,470	0	
2:46	966.8	29.3	61	s.	8.5	1,603	839.2	17.0	0.67	82	15.89	ssw.	13.2	1,571	0	
						1,750	825.0	16.8	.....	73	13.96	ssw.	12.9	1,715	0	
						2,000	800.2	16.5	.....	57	10.70	sw.	12.4	1,960	0	
3:10	966.5	29.6	59	s.	7.6	2,116	789.8	16.3	0.14	50	9.26	sw.	12.2	2,074	0	
						2,250	776.8	15.3	.....	51	8.86	sw.	12.2	2,205	110	1/10 Ci., w.; 1/10 Cu., s.
						2,500	754.2	13.4	.....	52	7.99	sw.	12.1	2,450	310	
						2,750	732.5	11.5	.....	54	7.33	sw.	12.0	2,694	500	
3:51	966.2	29.7	58	sse.	8.9	2,810	727.4	11.1	0.75	54	7.13	sw.	12.0	2,753	540	
						3,000	711.4	11.1	.....	40	5.28	sw.	11.4	2,939	.....	
3:56	966.2	29.7	58	sse.	8.5	3,045	707.1	11.1	0.00	37	4.89	sw.	11.2	2,983	.....	
						3,250	691.0	9.3	.....	35	4.10	sw.	14.0	3,184	.....	
4:01	966.2	29.6	59	s.	7.2	3,432	676.3	7.5	0.86	33	3.42	sw.	16.8	3,362	.....	
						3,250	692.8	8.9	.....	31	3.53	sw.	15.2	3,184	.....	
4:08	966.1	29.8	59	s.	6.3	3,079	707.1	10.3	0.49	30	3.76	sw.	13.7	3,017	.....	
						3,000	714.0	9.9	.....	35	4.27	sw.	12.9	2,939	.....	
4:10	966.1	29.8	59	s.	6.7	2,917	721.2	9.5	0.97	41	4.87	sw.	12.1	2,858	.....	
						2,750	735.4	11.1	.....	43	5.68	sw.	11.7	2,694	.....	
						2,500	757.5	13.6	.....	45	7.01	sw.	11.1	2,450	120	
						2,250	780.2	16.0	.....	47	8.54	sw.	10.5	2,205	40	
4:31	965.8	29.9	58	s.	7.6	2,163	788.2	16.8	0.74	48	9.18	sw.	10.3	2,120	20	Few Ci., w.
						2,000	803.1	18.0	.....	47	9.70	sw.	10.2	1,960	0	
						1,750	826.8	19.8	.....	45	10.40	ssw.	10.1	1,715	0	
4:46	965.7	29.6	60	s.	6.7	1,607	840.9	20.9	−0.05	44	10.88	ssw.	10.0	1,575	0	
						1,500	850.4	20.8	.....	53	13.02	ssw.	11.4	1,470	0	
						1,250	875.0	20.7	.....	73	17.83	s.	14.5	1,225	0	
5:02	965.5	29.5	59	s.	7.2	1,213	880.0	20.7	1.10	76	18.56	s.	15.0	1,189	0	
						1,000	900.0	23.0	.....	72	20.23	s.	12.8	980	0	
						750	926.7	25.8	.....	66	21.93	s.	10.3	735	0	
						500	953.5	28.6	.....	61	23.88	s.	7.8	490	0	
5:17	965.3	29.7	59	s.	6.7	396	965.3	29.7	.....	59	24.61	s.	6.7	388	.....	Few Ci., w.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 28, 1916, series (No. 3).

Surface.						At different heights above sea.											
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^6 *ergs.*	*volts.*	
6:05	964.8	29.0	60	s.	5.8	396	964.8	29.0	.....	60	24.04	s.	5.8	388	.....	Few Cl., w.
						500	953.7	28.1	.....	61	23.20	s.	8.7	490	0	
						750	927.2	26.1	.....	63	21.31	sse.	15.8	735	0	
6:14	964.7	28.6	62	s.	6.3	811	920.4	25.6	0.82	64	21.02	sse.	17.5	795	0	
						1,000	901.1	23.8	.....	68	20.05	sse.	18.1	980	0	
						1,250	875.8	21.4	.....	73	18.61	s.	19.0	1,225	0	
6:26	964.7	28.3	66	s.	6.7	1,352	865.3	20.4	0.96	75	17.98	s.	19.3	1,325	0	
						1,500	851.1	21.6	.....	51	13.16	s.	19.7	1,470	0	
6:28	964.7	28.2	66	s.	6.7	1,521	848.4	21.8	−0.83	48	12.54	s.	19.8	1,491	0	
						1,750	827.0	20.1	.....	47	11.06	s.	17.8	1,715	0	
						2,000	803.5	18.3	.....	46	9.67	ssw.	15.7	1,960	0	
6:48	964.6	27.8	69	s.	5.4	2,108	792.5	17.5	0.73	45	9.00	ssw.	14.8	2,066	0	
						2,250	780.2	16.6	.....	42	7.93	ssw.	14.4	2,205	90	
						2,500	757.3	14.9	.....	37	6.27	ssw.	13.8	2,450	240	
						2,750	735.1	13.3	.....	33	5.04	sw.	13.1	2,694	380	
						3,000	713.0	11.6	.....	28	3.82	sw.	12.5	2,939	500	
7:48	964.5	26.4	75	s.	4.9	3,145	700.8	10.6	0.72	25	3.20	sw.	12.1	3,081	.....	Cloudless.
						3,000	713.0	11.7	.....	28	3.85	sw.	12.6	2,939	.....	
						2,750	735.1	13.6	.....	33	5.14	sw.	13.5	2,694	410	
						2,500	757.1	15.6	.....	38	6.73	ssw.	14.5	2,450	350	
						2,250	779.6	17.5	.....	43	8.60	ssw.	15.4	2,205	280	
8:39	964.5	25.5	78	s.	5.8	2,195	784.4	17.9	0.75	44	9.02	ssw.	15.6	2,151	280	
						2,000	802.4	19.4	.....	43	9.69	ssw.	16.2	1,960	260	
						1,750	826.0	21.2	.....	43	10.83	ssw.	16.9	1,715	260	
9:02	964.5	25.4	77	s.	5.8	1,568	843.4	22.6	−0.86	42	11.52	ssw.	17.4	1,537	260	
						1,500	850.0	22.0	.....	52	13.75	ssw.	19.2	1,470	250	
9:15	964.5	25.3	78	s.	5.4	1,347	865.3	20.7	0.82	75	18.32	s.	23.3	1,320	150	
						1,250	875.8	21.5	.....	74	18.98	s.	23.1	1,225	90	
						1,000	900.0	23.6	.....	72	20.97	s.	22.6	980	0	
9:39	964.5	24.8	82	s.	5.4	824	918.6	25.0	−0.05	70	22.18	s.	22.2	808	0	
						750	926.0	25.0	.....	73	23.13	s.	19.3	735	0	
						500	952.4	24.8	.....	81	25.36	s.	9.5	490	0	
9:51	964.5	24.8	85	s.	5.4	396	964.5	24.8	.....	85	26.61	s.	5.4	388	.....	Cloudless.

June 28-29, 1916, series (No. 4).

P. M.																
10:26	964.5	24.4	83	s.	5.4	396	964.5	24.4	.....	83	25.38	s.	5.4	388	.....	Cloudless.
						500	953.3	24.5	.....	80	24.60	s.	9.2	490	0	
						750	927.0	24.8	.....	74	23.17	s.	18.6	735	0	
10:32	964.5	24.4	82	s.	5.8	814	919.7	24.9	−0.12	72	22.68	s.	21.0	798	0	
						1,000	900.8	23.1	.....	77	21.77	s.	22.3	980	0	
						1,250	874.8	20.8	.....	84	20.64	s.	24.0	1,225	0	
10:46	964.5	24.4	82	s.	5.8	1,319	868.0	20.1	0.93	86	20.24	s.	24.5	1,293	90	
10:49	964.5	24.4	82	s.	5.8	1,470	852.8	21.9	−1.19	45	11.83	s.	26.0	1,441	170	
						1,500	849.2	21.7	.....	45	11.68	s.	25.6	1,470	170	
						1,750	825.0	20.3	.....	44	10.48	s.	22.5	1,715	170	
						2,000	801.6	19.0	.....	44	9.67	ssw.	19.3	1,960	.....	
						2,250	779.0	17.6	.....	43	8.66	ssw.	16.2	2,205	.....	
11:28	964.2	24.6	82	s.	5.8	2,268	777.2	17.5	0.63	43	8.60	ssw.	16.0	2,223	.....	
						2,250	779.0	17.6	.....	43	8.66	ssw.	16.1	2,205	.....	
						2,000	801.6	19.4	.....	43	9.69	ssw.	17.8	1,960	.....	
						1,750	825.0	21.2	.....	44	11.08	ssw.	19.5	1,715	0	
12:24	963.7	24.4	82	s.	8.5	1,706	829.4	21.5	−0.93	44	11.29	ssw.	19.8	1,672	0	
12:28	963.7	24.4	82	s.	9.4	1,620	837.7	20.7	0.39	58	14.16	ssw.	20.3	1,588	0	
						1,500	849.0	21.2	.....	61	15.36	ssw.	21.1	1,470	0	
						1,250	874.0	22.2	.....	66	17.67	ssw.	22.8	1,225	0	
						1,000	899.3	23.1	.....	72	20.35	ssw.	24.6	980	0	
P. M.																
1:02	963.5	24.3	82	ssw.	8.9	795	920.7	23.9	0.08	77	22.84	ssw.	26.0	779	0	
						750	925.6	23.9	.....	78	23.13	ssw.	24.1	735	0	
						500	952.1	24.1	.....	81	24.32	ssw.	13.7	490	0	
1:12	963.6	24.2	83	ssw.	9.4	396	963.6	24.2	.....	83	25.07	ssw.	9.4	388	.....	Cloudless.

June 29, 1916, series (No. 5).

A. M.																
2:00	963.8	23.4	85	ssw.	7.6	396	963.8	23.4	.....	85	24.46	ssw.	7.6	388	.....	Cloudless.
						500	952.9	23.2	.....	84	23.89	ssw.	11.2	490	0	
						750	926.0	22.6	.....	82	22.49	s.	19.9	735	0	
2:08	963.9	23.5	86	ssw.	6.3	816	918.6	22.5	0.21	81	22.08	s.	22.2	800	0	Few St.Cu., ssw.
						1,000	899.6	23.5	.....	60	17.38	s.	25.6	980	0	Lightning.
2:14	963.9	23.2	86	ssw.	7.2	1,015	897.8	23.6	−0.55	58	16.90	s.	25.9	995	0	
						1,250	874.0	22.8	.....	52	14.44	s.	23.9	1,225	0	
						1,500	849.1	21.9	.....	45	11.83	ssw.	21.8	1,470	150	
						1,750	825.0	21.0	.....	38	9.45	ssw.	19.6	1,715	330	
2:50	964.1	23.0	89	s.	5.8	1,822	818.6	20.7	0.36	36	8.79	ssw.	19.0	1,786	380	1/10 St.Cu., ssw.
						2,000	801.8	19.2	.....	40	8.90	ssw.	17.6	1,960	440	
						2,250	778.7	17.1	.....	46	8.97	sw.	15.6	2,205	530	
						2,500	756.0	15.0	.....	51	8.70	sw.	13.7	2,450	640	
3:48	963.9	22.7	89	ssw.	6.3	2,651	742.9	13.7	0.84	54	8.47	sw.	12.5	2,598	.....	2/10 Ci.St.,ene.;2/10 St.Cu., ssw.
						2,500	756.0	15.0	.....	51	8.70	sw.	13.4	2,450	.....	Lightning last seen 4:18 a.m.
						2,250	778.7	17.1	.....	46	8.97	ssw.	15.0	2,205	.....	
						2,000	801.8	19.2	.....	40	8.90	ssw.	16.5	1,960	.....	
4:20	963.7	22.6	89	s.	5.4	1,906	810.4	20.0	0.75	38	8.88	ssw.	17.1	1,868	260	6/10 A. St., ne.;3/10 St.Cu., ssw.
						1,750	825.0	21.2	.....	39	9.82	ssw.	17.5	1,715	360	
						1,500	849.1	23.0	.....	41	11.52	ssw.	18.2	1,470	40	
4:37	963.6	22.5	90	ssw.	7.2	1,319	867.0	24.4	0.13	43	13.15	ssw.	18.7	1,293	0	
						1,250	874.0	24.5	.....	46	14.14	ssw.	18.7	1,225	0.	
4:50	963.6	22.6	89	ssw.	7.6	1,081	890.9	24.7	−1.31	55	17.12	ssw.	18.8	1,080	0	
						1,000	899.6	23.6	.....	58	16.90	ssw.	19.9	980	0	
4:52	963.5	22.6	89	ssw.	7.6	844	915.1	21.6	0.22	65	16.77	ssw.	22.0	824	0	
						750	926.0	21.8	.....	70	18.28	ssw.	18.9	735	0	
						500	952.0	22.4	.....	83	22.48	ssw.	10.6	490	0	
5:05	963.5	22.6	89	ssw.	7.2	396	963.5	22.6	.....	89	24.41	ssw.	7.2	388	.....	6/10 Ci.St.,ene.;2/10 St.Cu.,ssw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 29, 1916, series (No. 6).

Surface.						At different heights above sea.										Remarks.
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
A. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
5:49	964.3	22.5	90	s.	5.4	396	964.3	22.5	.....	90	24.53	s.	5.4	388	.....	6/10 Cl.St., ene.; 2/10 St.Cu., ssw.
						500	953.0	22.4	.....	89	24.11	s.	9.8	490	0	
						750	926.8	22.1	.....	86	22.88	ssw.	20.2	735	0	
5:53	964.4	22.6	89	s.	6.3	792	921.6	22.0	0.13	86	22.74	ssw.	22.0	777	0	
						1,000	900.8	23.8	.....	68	20.05	ssw.	22.4	980	0	
6:01	964.5	22.6	89	ssw.	4.9	1,145	885.2	25.1	−0.88	55	17.53	ssw.	22.6	1,122	0	5/10 Cl.St., ene.; 2/10 St.Cu., ssw.
						1,250	875.3	25.0	.....	48	15.21	ssw.	21.4	1,225	0	
6:18	965.2	22.6	89	ssw.	4.5	1,478	853.0	24.8	0.09	32	10.02	sw.	18.5	1,449	0	
						1,500	850.0	24.6	.....	32	9.90	sw.	18.3	1,470	0	
						1,750	826.0	22.5	.....	34	9.27	sw.	16.2	1,715	0	
6:31	965.7	22.6	89	ssw.	4.5	1,864	816.5	21.6	0.83	35	9.03	sw.	15.3	1,827	0	
						2,000	802.0	20.2	.....	36	8.52	sw.	15.0	1,960	0	
						2,250	779.6	17.5	.....	38	7.60	sw.	14.4	2,205	0	
						2,500	757.7	14.8	.....	39	6.56	sw.	13.7	2,450	0	
6:53	966.6	22.7	89	nw.	2.2	2,598	748.9	13.8	1.02	40	6.31	sw.	13.5	2,546	0	2/10 A.Cu., ene.; 4/10 St.Cu., s.
						2,500	757.7	14.7	.....	39	6.52	sw.	14.4	2,450	0	Altitude of St.Cu. base about 2,600 m.
						2,250	780.1	17.2	.....	37	7.26	sw.	16.8	2,205	0	
7:06	967.0	22.6	91	nne.	2.2	2,041	798.6	19.2	0.00	36	8.01	sw.	18.8	2,000	0	Thunder heard 6:58 a. m.
						2,000	803.2	19.2	.....	39	8.68	sw.	18.6	1,960	0	
						1,750	827.1	19.2	.....	55	12.24	nw.	17.6	1,715	0	Threatening.
7:12	967.0	22.4	92	n.	2.2	1,680	833.0	19.2	−0.92	59	13.13	nw.	17.3	1,647	0	
						1,500	851.7	17.5	.....	68	13.60	nw.	18.8	1,470	0	
7:13	967.1	22.4	92	n.	2.2	1,376	863.1	16.4	0.50	74	13.80	nw.	19.8	1,349	0	
						1,250	876.8	17.0	.....	77	14.92	n.	18.3	1,225	0	Altitude of St.Cu. base about 1,250 m.
						1,000	902.7	18.2	.....	84	17.56	n.	15.4	980	0	
						750	928.1	19.5	.....	90	20.40	nne.	12.4	735	0	
7:20	967.1	22.8	90	n	5.4	635	940.9	20.1	1.38	93	21.88	nne.	11.0	622	0	
						500	956.0	22.0	.....	89	23.53	ne.	7.0	490	0	
7:31	967.3	23.4	86	ne.	4.0	396	967.3	23.4	.....	86	24.75	ne.	4.0	388	.....	10/10 St.Cu., n.

June 29, 1916, series (No. 7).

A. M.																
8:12	967.5	24.8	83	e.	4.9	396	967.5	24.8	.....	83	25.99	e.	4.9	388	.....	9/10 Cl.St., ssw.; 1/10 St.Cu., e.
						500	956.0	24.0	.....	83	24.77	e.	5.2	490	0	
						750	929.4	21.9	.....	83	21.81	e.	5.8	735	0	Altitude of St.Cu. base about 800 m.
8:57	967.2	25.1	81	e.	5.4	887	914.3	20.8	0.81	83	20.39	ese.	6.1	870	0	
						1,000	902.6	20.1	.....	82	19.29	se.	6.0	980	0	
						1,250	876.5	18.5	.....	81	17.25	sse.	5.7	1,225	60	
10:22	966.7	25.7	78	e.	8.5	1,269	874.6	18.4	0.63	81	17.14	sse.	5.7	1,244	60	
10:33	966.5	26.1	77	se.	8.0	1,419	859.3	22.5	−2.73	45	12.27	ssw.	7.7	1,391	100	
						1,500	850.8	21.8	.....	45	11.75	ssw.	7.7	1,470	130	
						1,750	826.1	19.8	.....	45	10.40	ssw.	7.6	1,715	200	
						2,000	802.7	17.8	.....	44	8.97	ssw.	7.5	1,960	270	
10:40	966.3	26.4	76	se.	9.8	2,089	794.8	17.1	0.81	44	8.58	ssw.	7.5	2,047	290	3/10 Cl.St., ssw.; 5/10 St.Cu., se.
						2,250	779.4	15.9	.....	48	8.67	ssw.	7.8	2,205	330	
						2,500	757.0	14.1	.....	53	8.53	ssw.	8.3	2,450	410	
						2,750	735.2	12.3	.....	59	8.44	sw.	8.7	2,694	470	
						3,000	713.8	10.5	.....	64	8.13	sw.	9.2	2,939	550	
11:10	965.7	27.8	74	se.	7.6	3,239	693.6	8.8	0.72	69	7.82	sw.	9.6	3,173	540	2/10 Cl.St., ssw.; 2/10 St.Cu., s.
						3,250	692.1	9.3	.....	58	6.80	sw.	8.4	3,184	.....	
P. M.																
12:28	964.4	28.8	66	s.	8.5	3,270	690.6	10.2	.....	39	4.86	sw.	6.1	3,203	.....	
						3,250	692.1	10.4	.....	39	4.92	sw.	6.2	3,184	.....	
						3,000	713.8	12.6	.....	39	5.69	sw.	8.0	2,939	.....	
						2,750	735.2	14.7	.....	38	6.36	sw.	9.8	2,694	0	
1:02	964.2	29.8	68	ssw.	8.9	2,515	756.2	16.8	0.64	38	7.27	sw.	11.4	2,464	0	Few Cl.St., ssw.; few Cu., ssw.
						2,500	757.0	16.9	.....	38	7.32	sw.	11.4	2,450	0	
						2,250	779.4	18.5	.....	42	8.95	sw.	12.1	2,205	0	
						2,000	802.7	20.1	.....	45	10.59	ssw.	12.8	1,960	0	
1:18	964.0	30.3	62	ssw.	10.7	1,893	812.7	20.8	0.74	46	11.30	ssw.	13.1	1,855	0	
						1,750	826.1	21.9	.....	61	16.03	ssw.	16.1	1,715	0	
1:30	963.8	30.2	62	s.	13.4	1,581	842.5	23.1	−0.81	80	22.62	ssw.	19.7	1,551	0	
						1,500	850.8	22.4	.....	81	21.94	ssw.	19.5	1,470	0	
1:32	963.8	30.3	62	ssw.	12.5	1,323	867.8	21.0	1.00	84	20.89	ssw.	19.2	1,297	0	
						1,250	875.5	21.7	.....	81	21.03	ssw.	19.7	1,225	0	
						1,000	900.6	24.2	.....	72	21.74	ssw.	21.4	980	0	
1:55	963.6	30.6	61	ssw.	13.4	763	924.8	26.6	1.09	63	21.94	ssw.	23.0	748	0	
						750	926.2	26.7	.....	63	22.08	ssw.	22.6	735	0	
						500	952.2	29.5	.....	62	25.57	ssw.	14.8	490	0	
1:59	963.5	30.6	62	ssw.	11.6	396	963.5	30.6	.....	62	27.24	ssw.	11.6	388	.....	Few Cl., ssw.

TABLE 4.—*Free-air data from kite flights at Drexel Aerological Station, June, 1916*—Continued.

June 29, 1916, series (No. 8).

Surface.						At different heights above sea.										
Time.	Pressure.	Temperature.	Relative humidity.	Wind.		Altitude.	Pressure.	Temperature.	$\frac{\Delta t}{100\ m.}$	Humidity.		Wind.		Potential.		Remarks.
				Dir.	Vel.					Rel.	Vap. pres.	Dir.	Vel.	Gravity.	Electric.	
P. M.	*mb.*	°*C.*	%		*m. p. s.*	*m.*	*mb.*	°*C.*		%	*mb.*		*m. p. s.*	10^5 *ergs.*	*volts.*	
2:31	963.3	31.2	59	ssw.	11.2	396	963.3	31.2	.....	59	26.82	ssw.	11.2	388	.....	Cloudless.
						500	952.5	29.9	.....	59	24.90	ssw.	12.5	490	0	
2:40	963.2	31.0	58	ssw.	11.6	700	931.0	27.3	1.28	60	21.78	ssw.	15.0	686	0	
						750	926.0	26.9	.....	61	21.62	ssw.	15.0	735	0	
						1,000	900.0	24.6	.....	64	19.80	ssw.	14.8	980	0	
						1,250	874.5	22.4	.....	66	17.88	sw.	14.5	1,225	0	
2:55	963.1	31.4	56	ssw.	14.3	1,311	868.4	21.9	0.88	67	17.61	sw.	14.5	1,285	0	
						1,500	849.4	22.4	.....	48	13.00	sw.	12.9	1,470	0	
3:00	963.1	31.5	56	ssw.	12.1	1,552	844.7	22.6	−0.29	45	11.79	sw.	12.5	1,521	0	
						1,750	825.1	21.3	.....	41	10.39	sw.	12.6	1,715	0	
						2,000	801.5	19.5	.....	37	8.39	sw.	12.7	1,960	0	
3:20	963.0	31.7	53	ssw.	13.0	2,039	798.2	19.3	0.68	37	8.28	sw.	12.7	1,998	0	
						2,250	778.6	17.7	.....	34	6.88	sw.	11.2	2,205	0	
						2,500	756.2	15.8	.....	30	5.38	sw.	9.5	2,450	110	
						2,750	734.6	13.8	.....	27	4.26	sw.	7.7	2,694	.....	
						3,000	712.7	11.9	.....	23	3.20	sw.	6.0	2,939	.....	
4:22	962.8	31.7	53	ssw.	9.8	3,010	711.9	11.8	0.80	23	3.18	sw.	6.0	2,949	.....	
						3,000	712.7	11.9	.....	23	3.20	sw.	6.0	2,939	.....	
						2,750	734.6	14.0	.....	25	4.00	sw.	7.2	2,694	.....	
						2,500	756.2	16.1	.....	27	4.94	sw.	8.3	2,450	0	
						2,250	778.6	18.2	.....	29	6.06	sw.	9.5	2,205	0	
4:53	962.8	31.7	53	sw.	7.6	2,162	786.8	18.9	0.35	30	6.55	sw.	9.9	2,119	0	
						2,000	801.5	19.5	.....	35	7.93	sw.	10.1	1,960	0	
4:58	962.8	31.8	53	ssw.	8.9	1,759	824.5	20.3	−0.22	42	10.00	sw.	10.4	1,724	0	
						1,750	825.1	20.3	.....	42	10.00	sw.	10.4	1,715	0	
5:06	962.8	31.6	53	ssw.	7.6	1,621	837.9	20.0	0.84	58	13.56	ssw.	11.3	1,589	0	
						1,500	849.4	21.0	.....	60	14.92	ssw.	11.6	1,470	0	
						1,250	874.5	21.1	.....	64	18.09	ssw.	12.3	1,225	0	
5:17	962.9	31.5	54	ssw.	8.0	1,156	883.8	23.9	0.99	65	19.28	ssw.	12.5	1,133	0	
						1,000	900.0	25.4	.....	63	20.44	ssw.	11.8	980	0	
						750	926.0	27.9	.....	60	22.55	ssw.	10.6	735	0	
						500	952.5	30.4	.....	56	24.32	ssw.	9.4	490	0	
5:30	963.0	31.4	54	ssw.	8.9	396	963.0	31.4	.....	54	24.83	ssw.	8.9	388	.....	Cloudless.

June 30, 1916 (No. 1).

A. M.																
7:33	968.4	23.9	84	ssw.	5.4	396	968.4	23.9	.....	84	24.91	ssw.	5.4	388	.....	Cloudless.
						500	957.3	22.7	.....	84	23.18	ssw.	8.3	490	0	
7:38	968.5	24.2	83	ssw.	5.8	608	945.3	21.4	1.18	84	21.41	sw.	11.3	596	0	Few St.Cu.
						750	931.1	22.5	.....	74	20.17	sw.	10.1	735	0	
7:46	968.5	24.3	82	sw.	5.8	856	918.9	23.4	−0.81	66	18.99	sw.	9.2	839	0	
						1,000	905.0	22.8	.....	57	15.82	sw.	8.6	980	0	Few Ci.St.
						1,250	879.8	21.8	.....	42	10.97	ssw.	7.6	1,225	0	
10:03	968.9	27.6	70	ssw.	5.4	1,385	865.5	21.3	0.40	34	8.61	ssw.	7.0	1,358	0	Cloudless.
						1,500	855.0	20.8	.....	32	7.86	ssw.	6.9	1,470	0	
						1,750	830.5	19.6	.....	27	6.16	ssw.	6.5	1,715	0	
10:09	968.9	28.0	71	sw.	5.4	1,935	812.1	18.8	0.45	24	5.21	ssw.	6.3	1,896	0	
						1,750	830.5	19.6	.....	25	5.70	ssw.	5.6	1,715	0	
						1,500	855.0	20.7	.....	27	6.59	sw.	4.7	1,470	0	
10:13	968.9	28.1	71	sw.	5.4	1,421	862.1	21.1	0.69	28	7.01	sw.	4.4	1,393	0	
						1,250	879.8	22.3	.....	34	9.16	sw.	4.5	1,225	0	
						1,000	905.0	24.0	.....	43	12.83	sw.	4.6	980	0	
						750	931.1	25.8	.....	53	17.61	sw.	4.7	735	0	
						500	957.4	27.5	.....	62	22.77	sw.	4.8	490	0	
10:29	968.9	28.2	66	sw.	4.9	396	968.9	28.2	.....	66	25.24	sw.	4.9	388	.....	Cloudless.

June 30, 1916 (No. 2).

A. M.																
11:30	968.8	29.4	54	s.	5.8	396	968.8	29.4	.....	54	22.14	s.	5.8	388	.....	Cloudless.
						500	958.3	28.1	.....	55	20.92	s.	5.8	490	0	
11:36	968.7	29.8	54	s.	7.2	688	937.4	25.7	1.27	58	19.16	s.	5.7	675	0	
						750	931.0	25.1	.....	58	18.48	s.	5.7	735	0	
						1,000	905.0	22.8	.....	59	16.38	s.	5.8	980	0	Few Cu., s.
						1,250	879.1	20.6	.....	60	14.56	s.	6.0	1,225	0	
						1,500	854.0	18.4	.....	62	13.12	s.	6.2	1,470	0	
P. M.																
1:10	968.5	31.1	56	s.	5.4	1,750	829.6	16.1	0.96	63	11.53	s.	6.4	1,715	0	
						1,500	854.0	18.6	.....	62	13.29	s.	7.0	1,470	0	
						1,250	878.6	21.2	.....	58	14.60	s.	7.6	1,225	0	
						1,000	904.1	23.6	.....	56	16.31	s.	8.2	980	0	
						750	930.4	26.3	.....	53	18.14	s.	8.7	735	0	
1:47	968.3	31.2	53	s.	5.8	718	933.9	26.6	1.43	53	18.46	s.	8.8	606	0	
						500	957.0	29.7	.....	52	21.69	s.	6.2	490	0	
1:53	968.2	31.2	52	s.	4.9	396	968.2	31.2	.....	52	23.64	s.	4.9	388	.....	Few Cu., s.